Statistical Literacy

- At least as much about critical thinking (verbal) as about mathematical thinking (numerical).
- At least as much about words (syntax and semantics) as about numeric variables (algebra) and values (arithmetic).
- At least as much about rates and percentages as about variances and standard errors
- At least as much about reading tables and graphs as about reading regression diagnostics
- At least as much about selecting the relevant rate or percentage as about selecting the right statistical test
- At least as much about distinguishing experiments from non-experiments as about whether two populations have equal variances.
- At least as much about reading and interpreting summary statistics as about reading and interpreting detail data plots or tables.
- At least as much about thinking creatively on alternate explanations as about thinking mechanically on how to calculate a p-value.
- At least as much about thinking conditionally about observed associations as about thinking un-conditionally on their numerical strength.
- At least as much about conditional and contextual thinking as about unconditional and non-contextual thinking.

Milo Schield, August 12, 2001