

Memo to: Clinton-Eaton-Ingham Safe and Drug-Free Schools Consortium

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Subject: Interpreting Report Statistics

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The reports for the 2009-10 Survey Results include narrative descriptions of the survey questions for which the pre- and post-survey responses from matched sets of students were significantly different. Instead of considering a percent change as the appropriate measure, we used "Effect Size" to estimate which changes were significant.

The Effect Size (E.S.) is estimated by the ratio of the mean difference between the two groups of survey responses divided by the standard deviation of responses.

- An effect size (E.S.) of 0.2 represents a small difference between the two sets of survey responses.
- An effect size (E.S.) of 0.5 represents a moderate difference between the two sets of survey responses.
- An effect size (E.S.) of 0.8 represents a large difference between the two sets of survey responses.

The Effect Size can be either positive or negative; for example, if students are asked to rate the risk of using marijuana occasionally, a positive E.S. could mean greater risk and a negative E.S. could mean lesser risk (depending on how the item is worded and how the response scale is set up).

For these reports, any E.S. between -0.2 and +0.2 was considered statistically insignificant.