Here are five student learning outcomes.

They encompass most of what is covered in a confounder-based statistical literacy course.

They can be readily assessed.

1. Can distinguish association from causation in reality and in using ordinary English. Can use ordinary English to form arithmetic descriptions and comparisons of statistics.

2. Can identify and evaluate known influences (confounding, assembly, randomness and error) on a statistic. Can think hypothetically about influences that are unknown or unmeasured.

3. Can identify, evaluate and use various techniques to take control of – or control for – these influences. These techniques include the physical control of randomness to determine statistical significance and the mental control for the influence of measured confounders on a statistic, a statistical association and statistical significance.

4. Can use ordinary English to describe and compare ratios as presented in statements, tables and graphs using percent, percentage, rate and chance grammars.

5. Can evaluate the strength of evidence provided by statistics in the everyday media, in press releases and in journal articles.