

Abstract/synopsis:

In 2005 the American Statistical Association (ASA) endorsed the "Guidelines for Assessment and Instruction in Statistics Education"

(GAISE) College Report. The report was revised in 2016 to take into account changes in statistics practice and statistics education.

The report provides six recommendations (pp. 12--23):

1. Teach statistical thinking.
  - a. Teach statistics as an investigative process of problem-solving and decision-making.
  - b. Give students experience with multivariable thinking.
2. Focus on conceptual understanding.
3. Integrate real data with a context and purpose.
4. Foster active learning.
5. Use technology to explore concepts and analyze data.
6. Use assessments to improve and evaluate student learning.

In the appendices, the report also provides examples learning activities, data sets, technology tools, assessment items etc.

These are recommendations from leading authorities in statistics education. The recommendations are applicable to all courses in statistics, but especially to introductory courses. In the workshop we will discuss to what extent we adhere to the recommendations in our courses and how we can change our courses and the way we teach to have better compliance with them.