Statistics Teaching at the University Level Improving Inclusion and Student Success

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American Statistical Association's (ASA) Guidelines for Assessment and Instruction in Statistics Education

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Six recommendations:

Emphasize statistical literacy and develop statistical thinking

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Report has suggestions for how to make these changes, including examples in the appendices

https://www.amstat.org/asa/files/pdfs/GAISE/2005GaiseCollege_Full.pdf

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Still six recommendations fro m 2005, but re-ordered to talk about what to teach in intro stat courses and how to teach those courses.

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- Foster active learning
- Use technology to explore concepts and analyze data
- Output Description
 6 Use assessments to improve and evaluate student learning

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These have been suggested as topics that can/should be omitted from intro stats courses at various conference breakout sessions about statistics education at the Joint Statistical Meetings (JSM) and USCOTS (United States Conference on Teaching Statistics)

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- Drills with z-, t-, χ^2 , and F-tables
 - p-values should be interpreted by students, not computed
- Advanced training on a statistical software program
 - Programs like R and SAS are recommended to be introduced to students in subsequent statistics courses

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 - Understanding issues of design, confounding, and bias
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 - Understanding issues of design, confounding, and bias
 - Know how to apply knowledge of theoretical foundations to sound analysis of data
- Ability to communicate

https://www.amstat.org/asa/files/pdfs/EDU-guidelines2014-11-15.pdf