

**ZMATH 2015d.00824**

**Gellerstedt, Martin; Svensson, Lars; Östlund, Christian**

**Navigating in a new pedagogical landscape with an introductory course in applied statistics.** MacGillivray, Helen (ed.) et al., Topics from Australian conferences on teaching statistics. OZCOTS 2008–2012. New York, NY: Springer (ISBN 978-1-4939-0602-4/hbk; 978-1-4939-0603-1/ebook). Springer Proceedings in Mathematics & Statistics 81, 119-148 (2014).

Summary: During the last few decades, a great deal of effort has been put into improving statistical education, focusing on how students learn statistics and how we as teachers can find effective ways to help them. At the same time the use of computers, the Internet, and learning management systems has grown rapidly, and offers new educational possibilities. In this chapter, we will discuss how these changes in the pedagogical landscape have affected our introductory course in applied statistics. The course and teaching context are presented in relation to guidelines for assessment and instruction in statistics and to seven principles for effective teaching. Teaching strategies, course content, and examples of course material are included. Furthermore, results from evaluations are discussed, especially focusing on diversity in student characteristics. These results indicate a variation in learning styles both between and within groups. Finally, we present some of our ideas for future development including strategies for individualization and the use of educational mining.

*Classification:* K45 K75 K85 K95 U75

*Keywords:* teaching strategies; learning style; evaluation; monitoring; adaption  
doi:10.1007/978-1-4939-0603-1\_8