

17.12.2025

Title

The effect of distributed practice on students' conceptual understanding of statistics / Luc Budé ...

Publication year

2011

Source/Footnote

In: Higher education. - 61 (2011) 7, S. 69 - 79

Inventory number

30450

Keywords

Statistik : allgemein ; Prüfungsordnungen : Mathematik ; Studentenschaft : Studienverhalten

Abstract

In this study the effect of the reduced distribution of study activities on students' conceptual understanding of statistics is investigated in a quasi-experiment. Conceptual understanding depends on coherent and error free knowledge structures. Students need time to construct such knowledge structures. A curriculum reform at our university resulted in statistics courses which were considerably shortened in time, thereby limiting students' possibility to distribute study activities. Independent samples of students from before and after the reform were compared. To gauge conceptual understanding of statistics, students answered open ended questions in which they were asked to explain and relate important statistical concepts. It was shown that the reduction of distributed practice had a negative effect on students' understanding. The finding that condensed courses make it more difficult for students to reach proper understanding of the subject matter is of interest for anyone who is engaged in reforming curricula or designing courses. (HRK / Abstract übernommen) Budé, Luc, E-Mail: luc,bude@maastrichtuniversity.nl