

**ZMATH 2016f.01182**

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**Calibrating the difficulty of an assessment tool: the blooming of a statistics examination.**

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Summary: Bloom's taxonomy is proposed as a tool by which to assess the level of complexity of assessment tasks in statistics. Guidelines are provided for how to locate tasks at each level of the taxonomy, along with descriptions and examples of suggested test questions. Through the "Blooming" of an examination – that is, locating its constituent parts on Bloom's taxonomy – the difficulty level of an examination paper in statistics can be pseudo-objectively assessed, via both its Bloom's Index and the proportion of marks allocated to higher order cognitive skills. One suggested application of the approach is in assessing the impact on student learning due to course transformations implemented incrementally over time. Assessment tools, in particular examination papers, can be compared for difficulty and student performance. A case study is provided in which examinations from an introductory course are Bloomed post-hoc and compared to student performances.

*Classification:* K15 D65

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<http://ww2.amstat.org/publications/jse/v23n3/dunham.pdf>