

Profoundity in the obvious and simple, in teaching statistics at tertiary level

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Learning to teach and to assess statistics in tertiary level courses is an iterative process. The new tertiary teacher has knowledge of the content to be handled in courses, especially introductory courses, and associated confidence in material. The challenge lies in the major purpose of teaching, namely that the students learn. The students are the principal agents of a course. The teacher orchestrates and serves their endeavours. Students are generally diverse in cultural background, motivation, academic orientation, learning sophistication and stages of emotional maturity. They may have home or first languages other than the language of the tertiary classroom. The levels of mathematical fluency they bring to the first year Statistics course will vary from brilliant to absent. Students will also vary in previous access to and prior experience of technology that enhances the learning environment. The tertiary teacher must respond creatively to this initial diversity and to its various ongoing manifestations in the progress of learning. The teacher has to assess learning and self-assess the teaching. She must empower the students to adopt similar critical processes by which they can assume responsibility for their own levels of engagement with statistics. Some strategies will be presented, and some examples of threshold concepts and scaffolding. Their key roles in teacher practice and reflection, and in learning development and assessment, are discussed.

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