

Encouraging Significant Learning in Mathematical Statistics through Portfolios of Learning Evidence and Interview Assessments

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Abstract

There is a large amount of research suggesting that traditional assessments in higher education are outdated, and newer, more authentic assessment strategies should be pursued. One such form of authentic assessment is a portfolio of learning evidence, and another is the oral interview or oral assessment. However, the portfolio and interview are not simply method of assessment, but also primary drivers of learning and creative thinking. In mathematical education, the portfolio of learning evidence and interview assessment have not been implemented widely, although some authors have looked at the implications in terms of assessment. This mixed-methods study examines the interplay between the use of portfolios and interview assessments in a mathematical statistics module and Fink's framework for significant learning, and finds that are indeed numerous advantages that can be gained from using these novel methods instead of traditional learning and teaching methods.

Keywords: authentic, deep, Fink, mixed-methods, taxonomy