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Development of an Instrument for Measuring Diversity in Teaching Resources: The GRADES10©.

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Abstract

Background: Higher education institutions around the world have a responsibility to diversify their course content. This is an important consideration to ensure that students are prepared to serve a diverse population once they graduate, however, a lack of diversity representation in medical school curricula in particular, is reported in the literature. A paucity of reliable resources to support creating more inclusive content is also reported.

Methods: This study developed and validated a diversity measurement instrument, designed to look at representation in the areas of gender, religion, age, disability, ethnicity/race, sexuality, and socio-economic status. Early prototypes were sent to experts for validity testing and using their feedback, improvements and iterations were made to the instrument until the final instrument was agreed: the GRADES10©. The instrument was then applied to a variety of medical education resources to test for rater-reliability. An accompanying user guide was developed to support users with application of the GRADES10© in practice.

Results: Face validity was conducted by 10 experts on several iterations of the instrument from the early prototype (GRADESs7), until the final agreed GRADES10©. Rater-reliability was calculated by intraclass correlation coefficient (ICC) and Cronbach's Alpha measure of internal consistency. The GRADES10© instrument was shown to have an ICC of 0.83% (SD 0.725 – 0.907) $p < .0001$, and Cronbach's Alpha of 0.97.

Conclusions: Overall, this study has shown that the validated GRADES10© instrument is able to measure diversity in medical teaching resources reliably. The GRADES10© has the potential to contribute to creating a more inclusive learning environment by allowing its users to apply a diversity metric to their educational materials, to identify gaps and areas for improvement. If applied by medical schools in future, the GRADES10© may impact the grassroots of medical education diversification which may have a knock-on effect on student attitudes, experiences and ultimately on patient care.

Keywords: Diversity | Representation | Inclusivity | Medical education | Minority | Privilege

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