

## Innovative assessment tools for assessing competence

A single assessment tool may not be the best tool for the entire exam. Remember as an orthodontic student three basic domains have to be assessed, that is, knowledge, skill and attitude. A valid and reliable assessment requires the use of multiple assessment tools, keeping in mind feasibility and utility. This asks for innovative assessment tools to generalize the results.

Assessment is innovative for students and staff if it is new to their context or there is a shift to make assessment more holistic and diverse, resulting in qualitative descriptions or judgments. It may be a strategy where assessment is often integrated with teaching and learning involving students as active participants.

The innovative assessment tools in various learning domains provide help to generalize the results for consistency of performance. The 'generalizability' refers to applicability of the results of an assessment to more than the sample of cases or test questions that was used in a specific assessment. It guides us how confident we may be in predicting the performance of the candidate beyond the encounters that take place in the examination. By applying the principles and theory of generalizability it is also possible to examine how different aspects of observation (using different raters, employing different types of assessment instruments, or testing under different conditions) can affect the dependability of the scores. The generalizability coefficient is a statistical estimate of reproducibility of measurement and varies from 0.1 to 1.0 (a coefficient of 0.8 accepted as the minimum requirement for reliable measurement).

Innovative assessment is a combination of different assessment tools which will help to evaluate students in a reliable and valid way as they can measure different competences. It also aims to produce a more fertile learning environment and a more rewarding learning experience for both teachers and students. Innovative assessment tools include:

- Multiple choice questions, short answer and essay questions, extended matching items, key feature test etc to assess "knows and knows how".
- Short cases, long cases, OSCE, mini-cex, DOPS and 360 degree evaluation for performance, skill and attitude.
- Portfolio.
- Simulations.

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