Approaches to Assessment in Higher Education

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# A Review of the Literature on Assessment in Technology-mediated Higher Education

## 0.1 Introduction

The assessment of learning is a critical component of the work of higher education instructors. In Canada, there is important research at the K12 level exploring how teachers approach assessment in their classrooms, including DeLuca et al.’s ([2016](#Xedee9bc10fe7ddda531b14b05542852ae9f5f1e)) *Approaches to Classroom Assessment Inventory*, but there has been less work in relation to higher education. Research does show that instructors in higher education are less prepared in the areas of pedagogy and assessment than their K12 colleagues, suggesting that the approaches to assessment taken by higher education instructors are likely to be more variable, idiosyncratic, and influenced by instructors’ own past experiences rather than a deep understanding of assessment theory ([Lipnevich et al., 2020](#ref-lipnevichWhatGradesMean2020); [Massey et al., 2020](#ref-masseyAssessmentLiteracyCollege2020)). DeLuca et al. ([2021](#Xcffd07f338ae9c1e0f3a4638f84c8ddd08fd0be)) showed that assessment at the K12 level in Canada, China, and the USA is a complex process driven by both systemic and local factors. Adding to the complexity of assessment is the profusion of technology in higher education ([Broadfoot, 2016](#X51a879b1b801bbc5ad6e7fc588f4456f2973b2d); [Pellegrino & Quellmalz, 2010](#Xd3220b3c4c74762840488f1ab7714e7e895bc2e); [Webb & Ifenthaler, 2018](#ref-webbAssessmentTwentyFirstCentury2018)), a factor driven, in part, by the COVID-19 pandemic and the sudden shift to emergency remote teaching for the vast majority of higher education institutions. Given the complexity of assessment, combined with the relatively low academic preparation in the areas of pedagogy and assessment for higher education instructors, the influx of technology in higher education, and the smaller research base exploring approaches to assessment among higher education instructors, the purpose of this literature review will be to synthesize and analyze the literature related to approaches to assessment among higher education instructors. The review will begin with a survey of historical conceptions of assessment, followed by a deeper analysis of the literature since 2010 with a focus on assessment in technologically-mediated higher education.

This review is guided by three research questions:

1. What are the major themes or patterns in the literature related to approaches to assessment in higher education?
2. What are the major themes or patterns in the literature related to the impact of technology on assessment in higher education?
3. What gaps exist in the literature related to approaches to assessment in technology-mediated higher education?

Some researchers use terms, such as “technology-*enhanced*”, “technology-*enabled*, or”technology-*rich*” assessment, which show a positivity bias towards the use of technoloogy in higher education. Although this terminology will be a component of the search process, this review will use the more neutral term “technology-mediated assessment” whenever possible in light of the fact that assessment is not always “enhanced”, “enabled”, or “enriched” with the use of technology.

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