SOPHISTICATION SNAPSHOT: ANALYTICAL TOOL FOR MEASURING LECTURERS’ ONLINE TECHNOLOGY USE IN SCIENCE EDUCATION

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ABSTRACT
Learning analytics methods used to collect and investigate data pertaining to educational endeavours is of increasing interest for researchers. With respect to technology-enhanced learning, the need for evidence to support and inform provision and management of support strategies is integral, but still developing. This paper describes the sophistication snapshot tool, a resource developed for monitoring standards in blended and online teaching in the Sciences at the Australian National University. This five-level rubric measures individual subject performance against a series of standards descriptors of increasing sophistication, generating comparative scores that can be used to track changes over time, and between the various science disciplines.

Each “snapshot” identifies weaknesses and failures to meet stipulated minimum standards in blended and online learning environments, such as the need to include subject contacts, or a subject outline, and can be used to track trends in technology use between subjects and disciplines over time. Finally, the value of such data in the evaluation of trends, improvements in blended and online teaching, and professional development initiatives is discussed.