How teachers engage with student assessment data: Understanding antecedents to data-driven decision making

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Theoretical background
In recent years, education systems internationally have been encouraging data-use initiatives with the aim of improving student learning through data-driven decision making (DDDM) (Means, Chen, DeBarger, & Padilla, 2011). The use of student assessment data in particular has been promoted to guide teaching practices and progress student learning (Datnow & Hubbard, 2015). Despite this, the adoption of data-use practices by New South Wales classroom teachers has been slow. A review conducted for this study on current DDDM models emphasised that recent research endeavours tend to focus on the later stages of data use, such as decision-making skills and targeted instruction. However, the activities that precede the ability to utilise data are not well understood. Targeting outcomes without understanding the context or procedural mechanisms that produce them yields constrained insight into how to support and enhance teachers’ data use practices. To examine the underlying causes, the study adopted a unique approach to understanding teachers’ data use through the integration of core change management and organisational psychology principles (Lewin, 1947) together with underlying psychological and social determinants of behavioural intent (Ajzen, 1991).

Research question
The study qualitatively examined two core foundational activities that affect New South Wales classroom teachers’ use of student assessment data, referred to as assessment data collection (ADC) practices, and assessment data analysis (ADA) practices. Specifically, the study sought to answer: What are the processes that New South Wales teachers follow to a) collect and b) analyse student assessment data to inform their teaching practices?

Methods
A qualitative exploratory multiple case study design was used for this study, with one-on-one semi-structured interviews being the primary data collection method. New South Wales classroom teachers were asked to provide their opinions regarding how they collect and analyse student assessment data and why they performed the tasks in their respective ways. Such a design encouraged the deeper exploration to multiple perspectives (Yin, 2014; Denzin & Lincoln, 1994) through understanding the meaning participants hold to specific behaviours. This process encouraged an intricate view of existing practices and processes to consequently determine suitable points for future change.

Results
Data is being collected and analysed concurrently. The poster presentation will report on the study’s theoretical framework and the exploratory multiple case study design utilised. Similarly, the preliminary data of the thematic analysis and cross case synthesis of results that mapped prominent existing ADC and ADA processes will be presented.

Findings
The works of Little (2011) and Datnow and Hubbard (2015) assert that if teacher practice is properly traced and understood from a micro perspective, then dynamics for change can begin to occur. Consequently, this study’s enhanced insight into current practices provides a foundation that guides fit-for-purpose change initiatives to foster and augment data use in the classroom.

References
