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Coaching Physical Educators to Integrate Formal Assessment into Daily Instruction

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ABSTRACT

Formal assessment of student learning is a central teaching function. Numerous professional and Sport Pedagogy research papers have been dedicated to promoting formal integrated (i.e., formative) assessment.

Formative assessment occurs daily throughout instructional units. Researchers have reported that performing instructional duties and formally assessing student performance simultaneously is challenging for teachers. There is evidence that few physical educators integrate formal assessment into their daily instruction. Furthermore, professional teaching standards call for technology infusion (e.g., PDAs) in the teaching-learning process. However, research data show that among all teachers, physical educators are least likely to utilize technology.

Method: Seven physical education teachers participated in an on-going teacher development intervention aimed at increasing their use of formal integrated assessment while using PDAs. A second goal was to assess the teachers' ability to reliably collect students' physical activity (PA) level data on-the-fly. The effectiveness of the intervention (which included on-site coaching, workshops, in-lesson prompting, and incentives) was assessed using a multiple baseline design. Initially, teachers were to formally assess their students' PA levels. As teachers gained experience, they were offered additional assessment tools with which they could assess students' technical and tactical game play. Data on the time spent by teachers in various teaching functions (incl. formal and informal assessment), the focus of their assessment (Content, Management & Social Behavior), and lesson context were collected using the Systematic Observation of (Formal) Assessment of Students by Teachers (SOFAST; van der Mars, 2006) instrument. Interobserver-Agreement (IOA) percentages for these data ranged from 84–100%. Furthermore, teachers' observations of students' PA levels were checked for reliability by comparing their data with those of outside observers (using 90–120s Momentary Time Sampling intervals).

Results: All teachers increased their time spent formally assessing student learning upon the introduction of the intervention (Baseline $M = 3.6\%$; Intervention $M = 19.3\%$). Between-phase data overlap was minimal across all teachers. Furthermore, teachers' formal assessment focus shifted from managerial task performance during baseline to learning task performance. IOA's with outside observers ranged from 81.6 to 96.3%, showing that teachers can reliably assess their students' PA throughout lessons. Teachers' comfort levels with the use of PDAs varied, with four teachers becoming regular users of the PDA, while the other teachers continued to employ paper and pencil assessments.

Within the limits of the study's design and methods, it was concluded that ongoing teacher development as employed in this intervention is essential in having teachers develop an explicit focus on formal assessment of student learning.

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