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Kurtis Hewson
University of Lethbridge

John Poulsen
University of Lethbridge

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Standardized Testing: An Overview for Pre-Service Teachers

Kurtis Hewson
Faculty of Education
University of Lethbridge

John Poulsen
Faculty of Education
University of Lethbridge

Abstract

This paper serves as an overview for pre-service teachers of the current realities of standardized testing and offers some considerations when entering their first classrooms, where these assessments will most likely be a reality. It also aims to serve as a potential resource for study and discussion for pre-service teachers in their education programs.

Introduction

Considering the role standardized testing has assumed in education systems internationally, it can be safely assumed that a vast majority of pre-service teachers have experienced this form of assessment as students. More and more student's lives are becoming influenced by standardized testing, as a societal push for educational accountability has led to a dramatic increase in the use of these assessments across districts and nations (Guskey & Jung, 2013). Although their experiences as students can provide a useful perspective, it is important that pre-service teachers have a general understanding of the impact these assessments typically have in the classroom. As Cheryl Franklin and Jennifer Snow-Gerono (2007) remind us,

Disregarding high stakes standardized testing and increased accountability in public education does little more than further marginalize teacher education in an area where it should have a larger deliberative voice (pp. 2-3).

Moreover governments require that pre-service teachers understand and are able to use information from standardized tests. The Alberta Teaching Quality Standard (Alberta Education, 1997), for example, lists 17 Knowledge, Skills and Attributes (KSAs) required for interim certification. Item 11 (k) requires that beginning teachers, "Know how to analyse the results of classroom and large scale assessment instruments including provincial assessment instruments, and how to use the results for the ultimate benefit of students" (p. 2). To meet the requirements of the Alberta Teaching Quality Standard, Alberta's beginning teachers need to be aware of provincial standardized assessments and how to effectively use the results to ultimately improve teacher instruction and student learning.

This paper serves as an overview for pre-service teachers of the current realities related to standardized testing and offers some considerations when entering their first classrooms, where these assessments will most likely be a reality.

Definition

Stiggins (2008) states that,

These once-a-year tests are not likely to be of much value to classroom teachers as you plan and carry out day-to-day instruction. They are assessments of learning that are too infrequent, broad in focus, and slow in returning results to inform the ongoing array of daily decisions. But this does not mean that these tests are without purpose or value. That can communicate valuable information about students' achievement status to other decision makers" (pp. 347-348).

This relatively rationale statement could be considered a definition of the battle lines that have been drawn up between proponents of standardized testing and those against it.

The intent of standardized testing is to have large numbers of students write a single test, then to compare single scores against all others to see how an individual's score compares to the larger sample. The results are then posted on a bell curve that indicates where a score sits within descriptive statistical standards. Standardized tests are given to large groups numbering at least in the thousands, sometimes millions. To make the results as valid as possible, thus "standardizing" the administration of the assessment, the tests are:

1. Written at the same time and same day for all students.
2. Administered with consistent instructions.
3. Allow the same amount of time for each student to write the test.
4. Scored in the same manner.

Gronlund and Waugh (2009) note seven features to a modern standardized achievement test that, "measures a standard set of broadly based educational outcomes, uses standard directions and standard scoring procedures, and provides for a comparison of a student's score to that of similar students who have taken the same test under similar circumstances" (p. 207). The first feature is that the test is based on common textbooks and curriculum

guides. Second, experts must write the test questions. Third, questions are tried out on groups of students. The results determine which questions have the greatest discriminating power and thereby influence the next iteration of the test. Fourth, test specifications determine the final set of questions. Fifth, the directions are rigidly prescribed. Sixth, a large enough population assures that the norms used in the test results are valid. Seventh, the test is published with information on the test's administration, scoring, interpreting, and using the results.

Burke (1999) maintains that traditionally “standardized” meant that the test is standard or the same in three ways: (1) format/questions, (2) instructions, and (3) time allotment.

Format/questions means that the test questions are the same for all students writing the exam. The information that students are to show they know is asked in the same format that is usually multiple-choice. Multiple-choice is the format of choice because, as Stiggins (2008) suggests, “It is relatively easy to develop, administer, and score in large numbers” (p. 354). Further, for the test to be fair in the sense of all students having the same chance to answer each question correctly, all questions must be the same.

The instructions are to be the same as well. These instructions are to be delivered in the same way to all students so that no students are advantaged or disadvantaged. The last standardization is time-allotment. All students are to be given the same time to finish the exam.

In a time when the use of standardized, large-scale assessments are increasing, some nations have been involved in reforms effectively reducing their use, including England (Bew, 2011), as well Finland, Sweden, and Australia (Booi & Couture, 2011). Although these reform movements are evident in many nations and the use of standardized tests has been the subject of much debate and criticism (see Bower, 2013), standardized assessment programs continue to be a component of educational accountability across North America.

Standardized Tests in the Classroom

As pre-service teachers progress in their post-secondary studies and prepare for their opportunity to step into the classroom, they will most likely enter a world where

standardized, high-stakes assessments will impact on their professional work environment (Pedulla, 2003). Brookhart (2001) urges teacher preparation programs to limit the emphasis on large-scale testing while placing greater emphasis on classroom assessment. We completely agree with this statement. However, beginning teachers still need to have an awareness of the impact of standardized testing on contemporary classrooms, as well as be armed with some practical strategies that negate the negative impacts these assessments can have on classroom instruction. If pre-service teachers can be mindful of the following practical considerations related to standardized testing, they can be better equipped as beginning teachers to navigate a reality that, for better or worse, includes standardized, high-stakes assessments.

It is imperative that teachers are able to use the results from the standardized tests to improve their teaching and their students' learning. The following suggestions should be taken with the proviso that the primary function of standardized testing in most systems is to assess the entire system and that information about individual students may not be as valuable. The most accurate assessment of their students' abilities still must come from teachers. A single test should always be taken in context, providing a single snapshot of student learning that needs to be considered alongside other assessment information.

Avoid Teaching to the Test

Gordon and Reese (1997) believe “the single greatest criticism of high-stakes tests is that they inevitably lead to teaching to the test” (p. 346), whether through the narrowing of taught curriculum to focus exclusively on subjects included in the assessments (Guskey & Jung, 2013), or spending excessive amounts of time on test-preparation tasks (Boardman & Woodruff, 2004). Research suggests that there is, “ample evidence that teaching to the test is not the best way to improve test scores” (Bew, 2011). Teaching to the test may disengage students. As pre-service teachers, the best way to prepare for the reality of standardized assessments in the classroom is to learn about effective assessment practices. There is a strong connection between quality of classroom assessment and increase in average scores on large-scale assessments (Stiggins, 1999). To ensure strong student performance on standardized assessments, beginning teachers should focus on honing exemplary assessment

and instructional practices. That is not say that teachers should ignore test taking. Spending time examining how to take a test will probably aid students when they write and give them a sense of how to best write a standardized test.

Establish a Low-stress Environment

We know that “teachers outwardly acknowledge that some students do not do well on tests due to anxiety issues” (Alberta Assessment Consortium, 2012, p. 6). For beginning teachers, establishing a positive, low-stress environment for these assessments is critical and needs to be addressed through a two-fold approach. First, student anxiety often directly reflects the anxiety level of teachers with regard to standardized assessments. Exhibiting low levels of stress in relation to testing is paramount for teachers to set a positive tone. Second, ensuring a physical environment that supports students contributes to lowering student anxiety. Having snacks available, frequent breaks, comfortable seating, and easily accessible needed resources and supplies may also be of value.

Use Results as a Snapshot

It is important that pre-service teachers develop an assessment philosophy that understands summative assessments as snapshots that together contribute to a photo album of student learning. This philosophy is also true of standardized tests. “Large-scale assessments can only provide a snapshot of some of the learning. They are better designed to describe what groups of students are able to do” (Alberta Assessment Consortium, 2012, p. 7). With this in mind, it is important to view standardized tests and student achievement on them as just one more snapshot to add to the complete picture of student learning. When sharing results with parents, talk about how these results relate to student achievement on classroom assessments. As a pre-service teacher, it is important to understand, to model, and to communicate that one test cannot define a student’s learning or overall achievement.

Use Results to Inform Teaching

“By their design, large scale measures...are only able to measure a limited number of educational outcomes” (Alberta Assessment Consortium, 2012, p. 6). With this in mind, it

would be short sighted to not reflect upon student results in relation to the assessed outcomes and how they can be utilized to improve classroom practice. As beginning teachers, the learning curve is steep and should always involve a desire to improve as a professional. Student standardized test results can become one more piece of data to be used as part of that self-reflection. Although it can be considered dangerous to over-emphasize results when considering effective classroom instruction, results can serve as one more piece of the puzzle to inform teacher growth.

Conclusion

Achievement testing has issues especially related to situational/environmental, personal/emotional, and grade-spread requirement that may make individual applicability difficult to ascertain. However, as long as teachers understand that there may be limitations to the applicability of standardized exams, improvements in teaching and learning can take place. For pre-service teachers, it is important to not only have an awareness of the purpose and development of standardized assessments, but also be prepared as beginning teachers when these assessments become a reality for their students.

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