The Role of Assessment in Informing Our Decision-Making Processes

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Abstract
Assessment permeates many aspects of our educational society. With the passage of federal legislation (i.e., No Child Left Behind Act of 2001 and Individuals With Disabilities Education Improvement Act of 2004), assessment in the form of accountability is ever present in our K–12 educational system. Current assessment practices should be used in an iterative process that is fueled and influenced by data-based decisions. This article provides illustrations of and a rationale for how current educational assessment practices can influence decision-making processes at the state and district, school, program, and classroom levels.

Keywords
effective decision making, assessment, educational decisions

Assessment has moved to the forefront in our nation’s K–12 schools within the past decade undergirded by the passage of legislative acts such as the No Child Left Behind Act of 2001 and the 2004 reauthorization of the Individuals With Disabilities Education Improvement Act. The accountability movement was further bolstered by the fairly recent passage of the American Recovery and Reinvestment Act of 2009 that pledged funding to states that demonstrate evidence of significant improvement in student outcomes and gains in closing the achievement gap for low-income and minority students, students with disabilities, and limited English proficient students. Accountability through evidence of student performance data and tangible outcomes (e.g., higher annual standardized test scores) has become a top priority for schools.

Within K–12 educational settings, assessment once held a prominent gatekeeping role with regard to student access to individually tailored academic and behavioral services (Nagy, 2000). However, responses to federal requirements for greater accountability have led school systems to embrace proactive methods of assessment through universal screening practices within response to intervention (RTI) and schoolwide positive behavior support models (Horner, Sugai, & Anderson, 2010; Mellard, McKnight, & Jordan, 2010; Yell & Drasgow, 2007). This paradigm shift for assessment from a static gatekeeping role to a dynamic reiterative process designed to inform decision making has influenced assessment practices that permeate our educational society. Thorndike (2005) acknowledged that assessment has a “role in appraising outcomes of education, particularly in evaluating curricular innovations at the individual, school, and district levels” (p. 429). In addition, Burns, Schollin, and Zaslofsky (2011) posed that assessment data garnered for the purpose of aiding districts, schools, or individual students should be housed within a “problem-solving framework” (p. 108) to positively impact student outcomes. Roach (2008) asserted that it is essential to provide a seamless connection between the “collection of assessment data and the provision of high-quality interventions” (p. 5). With regard to education settings (e.g., state, district, individual schools), it is imperative that assessment not only inform instruction but also lead to the continual evolution of existing administrative procedures, practices, and allocation of resources. This special issue examined how assessment can inform effective decision making at multiple levels within an educational framework (i.e., at the state and district levels, program evaluation level, and school or classroom level).

Purview of the Special Issue
Gilbert, Compton, Fuchs, and Fuchs provide an illustration of state- or district-level practices that affect student outcomes through their presentation of a conceptual RTI model that expands existing RTI practices to aid in the

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early identification of students (i.e., kindergarten or first grade) who are at risk for reading disabilities. The authors posit a four-step RTI model to be administered over the course of several years. Aspects of this early intervention model include the use of screening tools (in Step 1) that use cut scores designed to address feasible base rates for states and school districts to maximize their available resources for the provision of Tier 2 and Tier 3 interventions. In addition, the authors recommend in Step 2 that school systems continue to gather data for their students via progress monitoring and/or through the administration of dynamic assessments for all the kindergarteners or first graders for a period of one academic year. Step 3 recommends the use of follow-up test data (e.g., annual state tests, standardized tests selected by the district) coupled with the use of logistic regression models to examine student performance. Step 4 of the model involves an iterative process whereby data obtained in Steps 1 to 3 are synthesized to revise cut scores of screening tools to address the psychometric indices of sensitivity, specificity, and classification accuracy. Gilbert and colleagues note that through the implementation of this model, schools will establish a normative database to use when examining subsequent student cohorts.

The work of Jolivette, McDaniel, Sprague, Swain-Bradway, and Ennis serves to remind the reader of populations of students and programs that are often overlooked or ignored by the society and the mandate for accountability. Jolivette and colleagues build on existing positive behavioral intervention and support (PBIS) literature to present a conceptual framework for applying PBIS within alternative settings (e.g., day treatment schools, residential facilities). Through this detailed plan to extend a three-tiered framework of positive behavior support within diverse alternative settings, the authors offer guidelines for garnering a team-based approach for examining existing practices and identifying evidence-based strategies to improve student outcomes. Guidance is also offered to PBIS teams in alternative settings on how to collaborate to create systematic data collection processes designed to drive instructional decisions and interventions with fidelity of implementation.

Now more than ever, the impact and cost-effectiveness of transition programming is in the national spotlight. Eaves, Rabren, and Hall examine the development and validity of the Post-School Outcomes Transition Survey (PSOTS). The PSOTS is an assessment tool employed at the statewide level, designed to evaluate the effectiveness of secondary school transition programs by providing a continuous measure of postschool outcomes such as student employment, enrollment in a secondary educational program, and active engagement within the community. Two cohorts of postsecondary students, who received transition services in their secondary program, completed the PSOTS a year following graduation. Their responses were examined via exploratory factor analysis resulting in 16 factors falling under two broad domains of postschool outcome dimensions and in-school program dimensions. The PSOTS holds promise in informing statewide transition programs whether evidence-based outcomes such as feeling prepared for and procuring employment, obtaining and maintaining a household, and becoming a member of one’s community are achieved.

The negative impact that inappropriate behavior and limited social and communication skills may have on student academic achievement and life outcomes is well recognized. Stichter, Herzog, O’Connor, and Schmidt investigated the development and utility of the General Social Outcome Measure (GSOM) as a progress monitoring tool to evaluate critical components indicative of social competence of students with pervasive developmental disorders (PDD). The authors purport that the GSOM addresses social competencies such as affect recognition, conversational reciprocity, recognition and demonstration of emotional states, and social problem solving. In all, 42 students with PDD ranging from 10 to 15 years of age were provided with a social competence intervention (SCI) consisting of five units and then administered the GSOM at multiple points in time (i.e., pretest, as a progress monitoring tool during instruction, posttest). The results revealed that the GSOM measured student change across respective instructional units. The authors contend that the GSOM holds promise as an effective progress monitoring tool for evaluating student responses to components of the SCI within the constructs of social competence measured by the GSOM.

An example of decision-making assessment at the individual student level of analysis is provided in the work of Sealsander, Johnson, Lockwood, and Gallagher. These investigators used curriculum-based multiple probes with pre- and posttests to investigate the effect of a novel decision rule teachers might use in advancing instruction to the next level of abstractness. Within the context of a concrete–semiconcrete–abstract mathematics instructional approach, the authors assessed the effect of terminating instruction after two consecutive days of instruction in which eight students’ frequency of correct responses exceeded the frequency of incorrect responses. Using a single-subject, multiple baseline design, Sealsander et al. demonstrated that every student may not need to achieve so-called mastery before advancing in the curriculum, thereby leading to more efficient use of classroom instructional time.

The success of teachers in terms of student outcomes is not strictly the result of teacher training programs but what happens in the educational milieu in which teachers work on a daily basis. The continued development of teacher expertise as well as the goal of teacher retention serves as a backdrop for the study of Mathur, Gerhrke, and Kim. They consider how teacher mentoring affects classroom practice and decision making. The perceptions of new-to-district mentees and their mentors were examined after a year of
mentorship activities. For the teachers involved, the approach showed that mentoring partnerships were worthwhile experiences with potential for affecting teacher decisions and classroom practice, and thereby impacting student outcomes. Given the disparity and often the severe shortage of resources within K–12 school systems, it is important to identify strategies to support teacher use of evidence-based practices as well as teacher self-efficacy. Mathur et al. call for investigating mentor program structure and outcomes to provide data to inform teacher practice.

Conclusion

What is the common thread for the articles published in this special issue? All the articles included in this special issue addressed different aspects of how assessment can inform decision-making processes at multiple levels of our educational society. Two articles expanded on existing conceptual frameworks (i.e., RTI and PBIS) at the schoolwide state and/or district level. Two articles explored the process of using assessment data to inform program evaluation, with one pertaining to the area of secondary transition programming and the other examining the efficacy of social competence programming for students with PDD. The final two articles gathered data using two distinct methodologies to inform decision-making processes at the individual student level and to evaluate a teacher mentoring program at the school and district level. Together these articles are illustrative of a range of investigative efforts, conceptual approaches, and methodologies that hold promise for improving student outcomes with informed decision making. These articles lend support to the following:

1. Assessment is a dynamic iterative process in which data can be garnered and used to inform, shape, and drive decision-making processes.
2. For assessment processes to provide valid information for refining and informing instructional processes, they should be based on multiple modes of student performance data.
3. Assessment processes should be flexible and readily tailored to address the unique needs of districts, schools, programs, and classrooms.

The mandate for accountability in K–12 education has bolstered the employment of assessment within contemporary problem-solving frameworks designed to affect student outcomes (Burns et al., 2011). It is essential that educators embrace the concept of accountability as a goal in the quest of improved student learning and life outcomes. Furthermore, assessment practices that are designed and implemented to perform in an iterative fashion can furnish data that will continually inform and refine our decision-making processes. To be socially relevant and meet multiple needs, assessment processes should be dynamic and exhibit a degree of flexibility that facilitates responding to changes at different levels of our educational system (e.g., state and district allocation of funds, diverse student populations, program revision and improvement). In the ever-changing landscape and mandate for educational accountability, accountability itself hinges on assessment processes being clearly linked to informing effective decision-making processes.

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