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Rapid Guessing and Social-Emotional and Behavioral Learning Needs

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Rapid Guessing and Social-Emotional and Behavioral Learning Needs: An NeMTSS Research Brief

Key Points:

- Rapid guessing is a behavior exhibited by test takers in which they respond to a question so quickly that it is not possible they have fully understood the content of the question (Wise & Kong, 2005). Response-time effort (RTE) is a way to assess the proportion of items on a measure that are rapidly guessed versus those who which are adequately assessed and answered.
- Rapid guessing has become a popular measurement for assessing student test engagement (Soland & Kuhfeld, 2019) on district and statewide assessments.
- There is research to suggest that social-emotional factors, such as self-management and self-efficacy, are related to rapid guessing (Soland, Jensen, Keys, Bi, & Wolk, 2019).
- Students who engage in rapid guessing may be at risk for low self-management, motivation, and academic self-efficacy (Soland & Jensen, 2017). Therefore, RTE data may identify students who need additional SEL supports or interventions to avoid dropout (Soland & Jensen, 2017). However, it is recommended that this data be used in conjunction with additional measures of SEL.

Social and Emotional Learning

Social and emotional learning can be described as a variety of skills including managing and maintaining relationships, responsible decision-making, managing emotions, clear communication, problem-solving, self-management, and self-awareness ("What is SEL?", n.d.). Social and emotional learning is an integral part of development and is critical within the educational context. This form of learning allows young people to develop and apply self-regulation, emotional, and relationship skills in their schools and communities ("Benefits of SEL", n.d.).

Research on SEL has indicated that healthy development of these skills can lead to positive academic and life outcomes. In a meta-analysis conducted by Taylor, Oberle, & Weissberg (2017) students who received SEL interventions fared better than same-aged peers in social-emotional skills, attitudes, and well-being indicators. Social and emotional learning interventions have also been positively related to academic achievement in some cases, with small-to-medium-sized improvements in math and literacy (McClelland, Tominey, Schmitt, & Duncan, 2017). Jones, Greenberg, and Crowley (2015) found that early social-emotional skills were key indicators of educational, employment, mental health, criminal justice system involvement, and substance use outcomes.

Rapid Guessing Behavior

As the number of district and statewide assessments has increased, so has the need for understanding students' level of test engagement and other factors that may influence a students' test scores and the interpretation of such scores. Rapid guessing has become a popular measurement for assessing student test engagement (Soland & Kuhfeld, 2019). Test

engagement or disengagement is often measured using behaviors such as “rapid guessing” or response-time effort (Wise, 2015; Wise & Kong, 2005).

Rapid guessing is a behavior exhibited by test takers in which they respond to a question so quickly that it is not possible they have fully understood the content of the question (Wise & Kong, 2005). On the other hand, response-time effort (RTE) is the proportion of items on a test that the student did not randomly guess. Response-time effort has been validated as a measure of test-taking engagement (Wise, 2015).

Beyond test-taking engagement, there is evidence to suggest that rapid-guessing can be used as an indicator of self-management (Soland, Jensen, Keys, Bi, & Wolk, 2019). Soland et al. (2019) found that social-emotional factors, such as self-management and self-efficacy, were related to rapid guessing behavior. Soland and Kuhfield (2019) found that repeated rapid guessing was related to self-management and academic self-efficacy.

Response-Time Effort and SEL

Response-time effort may be useful as an indicator of a student’s level of self-management (Soland & Jensen, 2017). Soland and Jensen suggested multiple applications for using RTE as a measure of self-management within an SEL context. The first application of RTE is in conjunction with other formal academic or achievement assessments that take place within the academic school year. Combined with formative assessment scores, RTE data can provide additional information that can be used to identify students who need additional support or intervention with self-management strategies (Soland & Jensen, 2017).

The second application of RTE is as an early indicator of students who may drop out of school (Soland & Jensen, 2017). Students with low self-management may also have difficulties with low academic self-efficacy. Students with low academic self-efficacy may also be less motivated in an academic context (Bandura, 1997). Students with lower motivation may be less engaged in the classroom and on formative assessments, may fail to complete coursework, be less prepared for class, have lower rates of attendance, drop out, or be at risk for dropping out. Therefore, it is critical that some interventions be put in place to keep students on track to graduate (Soland & Jensen, 2017).

Implications for Practice

Students who engage in rapid guessing may be at risk for low self-management, motivation, and academic self-efficacy (Soland & Jensen, 2017). Response-time effort is a way to assess the proportion of items on a measure that are rapidly guessed versus those who which are adequately assessed and answered. RTE has a useful measure of test engagement but may also have utility as a measure of SEL competencies such as self-management or an indicator of low academic motivation. Low self-management may result in behaviors such as unpreparedness in the classroom or failure to complete assignments. Low academic motivation has been linked to behaviors such as course failure, suspensions, expulsions, and absenteeism, which are early indicators of dropping out of school before completion. Therefore, RTE data may identify students who need additional SEL supports or interventions to avoid dropout (Soland & Jensen, 2017). It should be noted, however, that research on using RTE data as an SEL indicator is limited and these data ought to be used in conjunction with additional measures of SEL.

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