

# SWAAAC Evidence-Based Practice

## *Accommodations and High Stakes Testing*



*The following is a collection of peer-reviewed journal articles addressing the effects and the use of Accommodations on High Stakes Testing for students with disabilities. The intent of this document is to provide some foundational information for the implementation of evidence-based practice. Please contact the SWAAAC office if you would like to add an article to the this resource.*

*\*This document contains a variety of resources including, but not limited to peer-reviewed journal articles, magazine articles, academic papers, and conference proceedings. It is the responsibility of the reader to evaluate the sources and use their best judgment with regard to EBP applications.*

### Common Themes in the Research

-generally research demonstrates improved performance with the use of accommodations with a greater effect for students with disabilities when compared to students without disabilities.

-However, there is also a frequent question as to whether or not validity and construct integrity have been compromised.

### **A Meta-Analysis of Research on the Read Aloud Accommodation**

- Heather Buzick and Elizabeth Stone

**Abstract:** Read aloud is a testing accommodation that has been studied by many researchers, and its use on K-12 assessments continues to be debated because of its potential to change the measured construct or unfairly increase test scores. This study is a summary of quantitative research on the read aloud accommodation. Previous studies contributed information to compute average effect sizes for students with disabilities, students without disabilities, and the difference between groups for reading and mathematics using a random effects meta-analytic approach. Results suggest that (1) effect sizes are larger for reading than for math for both student groups, (2) the read aloud accommodation increases reading test scores for both groups, but more so for students with disabilities, and (3) mathematics scores gains due to the read aloud accommodation are small for both students with and without disabilities, on average. There was some evidence to suggest larger effects in elementary school relative to middle and high school and possible mode effects, but more studies are needed within levels of the moderator variables to conduct statistical tests. (Buzick & Stone, 2014)

### **A Summary of the Research on the Effects of Test Accommodations: 2013-2014**

- Sheryl S. Lazarus, Christopher M. Rodgers and Martha L. Thurlow

**Abstract:** The use of accommodations in instruction and assessments continues to be of great importance for students with disabilities. This importance is reflected in an emphasis on research to investigate the effects of accommodations. Key issues under investigation include how accommodations affect test scores, how educators and students perceive accommodations, and how accommodations are selected and implemented. (Rodgers, Lazarus, & Thurlow, 2016)

### **Effects of Wait Time When Communicating with Children Who Have Sensory and Additional Disabilities**

- Nicole Johnson and Amy T. Parker

**Abstract:** This study utilized wait-time procedures to determine if they are effective in helping children with deafblindness or multiple disabilities that include a visual impairment communicate in their home. *Methods:* A single subject with an alternating treatment design was used for the study. Zero- to one-second wait time was utilized before prompting for a response during three baseline sessions. This was compared to 5-, 10-, and 15-second wait-time increments used during six intervention sessions. Three participants with visual impairments, developmental disabilities, and communication delays participated in the study. One of the participants was deafblind. *Results:* All three participants responded twice as often during intervention phases as in baseline sessions. The results showed that 5-, 10-, and 15-second wait times were effective when reciprocally communicating with children who have multiple disabilities with a visual impairment or deafblindness. (Johnson & Parker, 2013)

### **Five of the Most Frequently Allowed Testing Accommodations in State Policy**

- Sara E. Bolt and Martha L. Thurlow

**Abstract:** In the past, students with disabilities were frequently excluded from statewide testing. With changes in federal laws, states are seeking ways to increase the participation of students with disabilities in testing. Many have developed lists of allowable accommodations to facilitate participation. Although there has been an increase in research on how accommodations can aid in the measurement of skills among students with disabilities, many questions remain unanswered. The degree to which accommodations may compromise the integrity of tests is not clear. As a result, accommodation decision making is difficult. A review of research on 5 frequently allowed test accommodations (dictated response, large print, Braille, extended time, and sign language interpreter for instructions) was conducted; 36 studies were identified. Results indicate mixed support and nonsupport for providing these accommodations to students with disabilities. Guidelines for effective accommodation decision making and administration are discussed, and recommendations for future research are given. (Bolt & Thurlow, 2004)

### **Multiple Constructs and the Effects of Accommodations on Standardized Test Scores for Students with Disabilities**

- Stephanie W. Cawthon, Eching Ho, Puja G. Patel, Deborah C. Potvin and Katherine M. Trundt

**Abstract:** Students with disabilities frequently use accommodations to participate in large-scale, standardized assessments. Accommodations can include changes to the administration of the test, such as extended time, changes to the test items, such as read aloud, or changes to the student's response, such as the use of a scribe. Some accommodations or modifications risk changing the difficulty of the test items or decreasing the validity of how test scores are interpreted. Questions regarding the validity of accommodated tests are heightened when scores are used in high-stakes decisions such as grade promotion, graduation, teacher merit pay, or other accountability initiatives. The purpose of this article is to review existing literature on multiple constructs that affect validity of interpretations of accommodated assessment scores. Research on assessment accommodations continues to grow but offers few conclusive findings on whether they facilitate fair and accurate measurement of student knowledge and skill. The validity of an accommodated score appears to vary depending on several factors such as student characteristics, test characteristics, and the accommodations themselves. A multiple construct approach may facilitate more accurate evaluations of the effects of accommodated test scores. (Cawthon, Ho, Patel, Potvin, & Trundt, 2009) (Cawthon, Ho, Patel, Potvin, & Trundt, 2009)

### **REL Appalachia Ask A REL Response – Data, Literacy Use, Math**

- REL Appalachia

**Abstract:** What evidence exists that assessment accommodations for students with disabilities in the subjects of reading and math (a) are appropriate and effective for meeting individual students' needs to participate in the assessments, (b) do not alter the constructs being assessed, and (c) allow for meaningful interpretations of results and comparison of scores for students who need and receive accommodations and students who do not need and do not receive accommodations? (Appalachia, REL Appalachia Ask A REL Response - Data, Literacy Use, Math, 2019)

### **REL Appalachia Ask A REL Response – Data Use, English Learners, Literacy, Math**

- REL Appalachia

**Abstract:** What evidence exists that assessment accommodations for English learners in the subjects of reading and math (a) are appropriate and effective for meeting individual students' needs to participate in the assessments, (b) do not alter the constructs being assessed, and (c) allow for meaningful interpretations of results and comparison of scores for students who need and receive accommodations and students who do not need and do not receive accommodations? (Appalachia, REL Appalachia Ask A REL Reponse - Data Use, English Learners, Literacy, Math, 2019)

### **The Effects and Perceived Consequences of Testing Accommodations on Math and Science Performance Assessments**

- Stephen N. Elliott, Thomas R. Kratochwill, Brian C. McKevitt and Christine Kerres Malecki

**Abstract:** The present study examined the effect accommodations have on test results of students with and without disabilities and documented experts' judgments about the appropriateness of testing accommodations. Test score data were collected from 218 fourth grade students with and without disabilities on mathematics and science performance tasks and from eight testing experts who evaluated the fairness and validity of a sample of testing accommodations used with these students. Results indicated that, for most students with disabilities and some students without disabilities, packages of testing accommodations had a moderate to large effect on performance task scores. Expert reviewers rated most accommodations for a student with disabilities as being both valid and fair, and they gave accommodations listed on a student's individualized education program (IEP) significantly higher validity and fairness ratings than accommodations that were not listed on the student's IEP. Interpretations of these data are provided and implications for practice and future research are discussed. (Elliott, McKevitt, Kratochwill, & Malecki, 2009)

### **The effect of read-aloud assistance on the text comprehension of dyslexic and non-dyslexic English language learners**

- Milen Košak-Babuder, Judit Kormos, Michael Ratajczak Karmen Pižorn

**Abstract:** One of the special arrangements in testing contexts is to allow dyslexic students to listen to the text while they read. In our study, we investigated the effect of read-aloud assistance on young English learners' language comprehension scores. We also examined whether students with dyslexia identification benefit from this assistance differently from their peers with no official identification of dyslexia. Our research was conducted with young Slovenian learners of English who performed four language assessment tasks adapted from a standardized battery of Slovenian national English language tests. In a counter-balanced design, 233 students with no identified dyslexia and 47 students with dyslexia identification completed two language comprehension tasks in a reading only condition, one task with read-aloud assistance and one task in listening-only mode. We used Generalized Linear Mixed-Effects Modelling (GLMM) to estimate accurately the effects of the mode of administration, dyslexia status, and input text difficulty, while accounting for error variance owing to random differences between students, texts, and questions. The results of our study revealed that young L2 learners with no dyslexia identification performed similarly in the three conditions. The read-aloud assistance, however, was found to increase the comprehension scores of dyslexic participants when reading difficult texts, allowing them to perform at the level of their non-dyslexic peers. Therefore, our study suggests that this modification of the test administration mode might assist dyslexic students in demonstrating their text comprehension abilities. (Košak-Babuder, Kormos, Ratajczak, & Pižorn, 2019)

### **Using Factor Analysis to Investigate the Impact of Accommodations on the Scores of Students with Disabilities on a Reading Comprehension Assessment**

- Frederick Cline, Linda Cook, Daniel Eignor, Yasuyo Sawaki and Jonathan Steinberg

**Abstract:** The purpose of this study was to investigate the impact of a read-aloud test change administered with the Gates-MacGinitie Reading Test (GMRT) on the underlying constructs measured by the Comprehension subtest. The study evaluated the factor structures for the Level 4 Comprehension subtest given to a sample of New Jersey fourth-grade students with and without reading-based learning disabilities. Both exploratory and confirmatory factor analyses were used to determine whether or not the GMRT Comprehension subtest measures the same underlying constructs when administered with and without a read-aloud test change. The results of the analyses indicated factorial invariance held when the Comprehension subtest was administered to groups of students without disabilities who took the test under standard conditions and with a read-aloud test change and for groups of students with reading-based learning disabilities who also took the test under standard conditions and with a read-aloud test change. (Cook, Eignor, Steinberg, Sawaki, & Cline, 2014)

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