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Alternative Assessments Based on Modified Academic Achievement Standards (AA-MAS) *Selected Research*

Students whose disability prevents them from achieving grade-level proficiency and who are not anticipated to meet achievement standards in the same time frame as other students may be eligible for alternative assessments based on modified academic achievement standards (U.S. Department of Education, 2007). The No Child Left Behind Act provides these rules for determining a student's eligibility for AA-MAS (summarized by Cho & Kingston, 2011):

1. The student's individualized education program (IEP) team must decide the student's eligibility to participate;
2. states must provide school districts with clear and appropriate criteria to guide IEP teams' decision making regarding eligibility;
3. each subject area must be considered separately;
4. the decision regarding eligibility must be made annually based on multiple valid and objective measures of the student's achievement; and
5. the student must be receiving instruction based on his or her grade-level general curriculum (students in an AA-MAS should not be involved in "out-of-level" tests).

For additional information about the AA-MAS, see the summary from the U.S. Department of Education: [Final Regulations on Modified Academic Achievement Standards](#).

Empirical Evidence about AA-MAS

- Students who would be eligible for AA-MAS based on federal policy criteria are the most likely from among peer groups to benefit from the modifications made for the purpose of enhancing accessibility, the primary purpose for developing an AA-MAS (Elliott et al., 2010).
- Experimental evidence has shown that initial versions of AA-MAS can be just as reliable as the original versions of tests and can produce effects whereby the item difficulties experienced by eligible students are reduced somewhat more than they are for students who would not be eligible (Elliott et al., 2010).
- AA-MAS can measure grade-level content aligned to state academic content standards and assess knowledge at the same depth as unmodified sibling items when the items have been modified based on a theory-driven and evidence-based approach to increase test accessibility (Elliott et al., 2010).
- A study involving three groups of 755 eighth-grade students (only one of which was eligible for AA-MAS) revealed that a theoretical and data-based approach to modification of test items in AA-MAS can yield items and tests that are as reliable as the originals (Kettler, Elliott, & Beddow, 2009; Kettler et al., 2011).

- An empirical study that compared students eligible for AA-MAS with those who were ineligible found that the effect of modifications to test items in AA-MAS was as intended—more helpful for eligible students than ineligible students (Kettler et al., 2009; Kettler et al., 2011).
- Empirical studies have not yet determined whether the improvements in test performance on an AA-MAS will be large enough to make a significant difference in the percentage of students who are proficient (Elliott et al., 2010).
- A study that included all 50 states found that a greater number of test accommodations on regular assessments were allowed by states that were not planning to develop an AA-MAS than by those that did plan to develop one, thus raising the concern that states that allow a very limited number of test accommodations may be more likely to assign students to an AA-MAS (Lazarus, Cormier, & Thurlow, 2011).
- In a study of thousands of elementary students that took an AA-MAS in reading or math in one Midwestern state, researchers found that 5.3% of those assigned to the 2009 AA-MAS in reading and 6.2% of those assigned to the 2009 AA-MAS in math had scored proficient or above on the 2008 general reading and math assessment. This prompted researchers to question the students' assignments and the IEP teams' justifications for them (Cho & Kingston, 2011).
- An analysis of the 2008 Federal Peer Review of the five states with an AA-MAS option at that time found that each state met some of the federal requirements under NCLB or IDEA, but none met all of them. One problem that all the states had in common was in creating guidelines to ensure that appropriate students are identified (Filbin, 2008; Lazarus et al., 2006; Thurlow, 2008).
- Using existing data to compare changes in states' use of AA-MAS between 2007 and 2008, researchers found that the characteristics of such assessments had changed rapidly in that year, likely to better align them with the new regulations (Lazarus & Thurlow, 2009).
- In a survey of states, researchers found that perspectives on AA-MAS varied among the 22 states that responded, although the results suggest that states want all students to have an opportunity to demonstrate their skills and have access to the general curriculum. However, respondents realize that developing measurement tools that yield reliable and valid scores is demanding and costly work. Time, money, and guidance are required to sufficiently develop an AA-MAS (Palmer, 2009).
- Anecdotal evidence suggests that coupling accommodations for instruction and assessment will lead to more effective teaching and learning and should result in improved outcomes for students (Cox, Herner, Demczyk, & Nieberding, 2006).

Empirical Evidence about Accommodations in General

- The effects of testing accommodations are highly variable and the performance of both students with disabilities and those without disabilities seem to be affected (Sireci, Scarpati, & Li, 2005).

- Research has not demonstrated any evidence of harmfulness or unfairness when used in state testing (Sireci et al., 2005).
- A literature review that investigated the empirical evidence supporting the effectiveness of accommodations for adolescents or adults with learning disabilities found that there are very few empirically based studies to support or reject the effectiveness of many accommodations (Gregg, 2012).
- One study on accommodations in general found that states that provided more accommodations for students with disabilities also tended to have lower discipline rates among those students. This finding prompted the researchers to suggest that states that allow more test accommodations might also provide more accommodations during instruction, resulting in students with disabilities being more easily assimilated into the classroom environment and less likely to have discipline problems caused by frustration or feeling out of place (Cox et al., 2006).
- One study that preceded the availability of the AA-MAS option determined that accommodations in general have a positive impact on students with disabilities, leading to higher participation rates and higher test scores (Elliott & Roach, 2002).

General Information about AA-MAS

- Several challenges to ensuring the validity of inferences and the reliability of scores from alternate and modified assessments have been identified, including limitations such as small sample sizes, fewer test items, limited content coverage, and a decreased number of detractors (Buzick & Laitusis, 2010).
- Research has not provided any definitive conclusions on the validity of interpretations of scores from alternate or modified assessments taken with accommodations, as well as the general assessment (Buzick & Laitusis, 2010).
- The commitment to provide access to large standardized assessments for students with disabilities has created several measurement issues, the most significant of which is how to provide access via a variety of accommodations and modifications while maintaining the validity of the test score interpretations (Randall & Engelhard, 2010).
- The identification of students eligible for an AA-MAS has become an evolving, inferential, conceptual, and empirical enterprise, and it is complicated by the fact that there may be students without disabilities for whom an assessment of modified academic achievement standards would be most appropriate (Egan, Ferrara, Schneider, & Barton, 2009).
- One potential benefit of AA-MAS is that it may provide a missing link whereby students are enabled to progress from alternative assessments based on alternate academic achievement standards to the AA-MAS or from the AA-MAS to the regular assessment (Egan et al., 2009).
- AA-MAS are intended to make it possible for students with disabilities to demonstrate what they know and are able to do, and the expectation is that there will be an increased emphasis on high-quality instruction of the measured content (Kettler et al., 2009).

- Accommodations are designed to increase the validity of inferences that can be made from a student's scores, so that those scores can be meaningfully compared to scores of students for whom testing accommodations are not needed (Kettler et al., 2009).
- The intent of AA-MAS is to remedy the problem created by the absence of an appropriate assessment option for students whose disabilities have kept them from achieving grade-level proficiency and whose progress toward that goal is such that they won't reach it in the same time frame as other students (U.S. Department of Education, 2007).
- It is possible to find investigations that either support or challenge the use of almost any given accommodation or combination of accommodations (Shriner & Ganguly, 2007).
- The purpose of the AA-MAS is to have a more inclusive accountability system by providing states with greater flexibility for assessing students with disabilities (Shriner & Ganguly, 2007).

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