

Kansas Alternate Assessment Alignment Study

Links for Academic Learning

Executive Summary

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Executive Summary

In accordance with the Individuals with Disabilities Education Act, the Kansas Extended Standards were developed to be consistent with the general standards for the purpose of ensuring that the education of all students, including those with the most significant disabilities, is uniform with goals and standards for students without disabilities as established by the Kansas State Board of Education. The extended standards serve as the basis of the Kansas Alternate Assessment (KAA). Extended standards and their associated benchmarks are worded identically to the general curricular standards for each content area. Downward extensions of the general standards are explicit only at the finest grain, which in Kansas is the indicator. Each extended indicator is intended to be used for instruction and assessment of students with severe cognitive disabilities within its corresponding benchmark and standard. Therefore, the extended indicators are referenced to general achievement indicators under those same benchmarks and standards.

The Kansas Alternate Assessment Alignment Study was undertaken at the suggestion of the Kansas Technical Advisory Committee. Members of the Technical Advisory Committee had raised questions concerning the alignment of the KAA and the Kansas Extended Standards with the general curricular standards. After a review of the literature and consideration of options for an alignment study, Links for Academic Learning was suggested as an appropriate methodology and was approved by the Technical Advisory Committee in September 2009.

Links for Academic Learning (LAL) (Flowers, Wakeman, Browder, & Karvonen, 2007) defines eight criteria for instruction and assessment that are intended to ascertain the links of a state's alternate assessment system—including its extended standards (if they are used) and its performance tasks or test items—with grade-level curriculum. Each criterion of the LAL is evaluated by special educators, content area experts, or teachers of students participating in the AA-AAS. For the purpose of the current study, several modifications and additions were made to the LAL process. Specifically, both the number and type of raters and the methodology for interpreting the reviews were altered, but not the topics or content of the reviews.

In order to address the eight criteria of the LAL, the KAA Alignment Study comprised three phases. The first phase was a review of the KAA, Kansas

Extended Standards, and professional development materials by a national panel of special educators external to the state of Kansas. The second phase consisted of teams of Kansas special education and content area teachers who collaboratively reviewed the Kansas Extended Standards and their intended linkage with general academic achievement standards. These teams were larger than required by the LAL, and disagreement and minority opinions among the reviewers were recorded for further analysis. The third phase involved an online survey of Kansas special educators, each of whom was teaching a student participating in the KAA, to investigate their professional development and classroom instruction.

The Kansas extended indicators formed the unit of analysis for this alignment study. In Kansas, teachers develop tasks to assess each extended indicator that has been selected as an appropriate target of assessment for each student. There is no bank of tasks or specific guidance on how to create a task, and for this reason there is substantial variation in the types and qualities of tasks used as evidence of learning. Furthermore, the extended indicators are not grade specific and are referenced to different general indicators at several grade levels. Conversely, several general indicators may be referenced to a single extended indicator, creating a network of linked indicators across grade and difficulty levels. One of the objectives of this study was to identify an improved alignment structure, which could only be accomplished at the indicator level.

Special Education Review

The special education review portion of the Kansas Alternate Assessment Alignment Study increased the number of reviewers from three, which is typical for an LAL study, to six. Three were trained LAL reviewers from the University of North Carolina-Charlotte. These reviewers worked as a team to demonstrate consistency and inter-rater reliability in their ratings. Three additional academic reviewers were recruited to review the extended standards in their individual areas of expertise. This procedure allowed us to obtain alternate viewpoints and to compare and contrast reviewer ratings.

The special education reviewers evaluated three characteristics of each extended indicator: level of symbolic communication required to demonstrate achievement, highest referenced grade, and age appropriateness. Following their review of the extended indicators, the

special education reviewers evaluated KAA administration and professional development materials to provide feedback on the degree of inference that can be made about student learning, the presence of barriers for students with specific characteristics, teachers' professional development topics, and evidence of program quality indicators.

The subject of symbolic communication was a source of confusion in the LAL and for reviewers, who did not agree on the levels of symbolic communication skill required for performance on the extended indicators. The three parts of the LAL use different and inconsistent definitions for symbolic communication, with only one of these specifically denoting differences between expressive and receptive language skills. Portions of the LAL reveal misconceptions about symbols, symbol use, and intentional communication. A review of literature in this area similarly revealed a lack of consistency among researchers. Examples include the term "concrete symbols," which is used in the deaf-blind field for tangible objects that represent other objects but is not used in other contexts; and the terms "nonsymbolic," "presymbolic," "emerging symbolic," and "early symbolic," none of which are clearly defined and may or may not refer to overlapping stages of symbolic communication development. Adding to the confusion is empirical research showing that neither children nor adults benefit from unfamiliar iconic graphics accompanying text, and that children learn some gestures and the use of objects to represent other objects concurrently with receptive symbolic language rather than before language develops. These findings call into question the assumption that gestures, objects, and iconic graphics are more accessible to individuals with intellectual disabilities than abstract symbols like words and manual signs.

Alternate viewpoints expressed by raters with different backgrounds and prior experience with the LAL were notable in several areas of the review. For the first task, which involved the level of communicative competence required to demonstrate achievement on the extended standards, independent reviewers concluded that facility with abstract symbolic communication was required to a greater extent than the review team found. In terms of the age appropriateness of the extended indicators at the highest referenced grade, the LAL review team rated almost all extended indicators as neutral in content and suitable for any age, perhaps because the indicators were worded intentionally so that they could be used at any grade. The independent reviewers, in contrast, rated many of the extended indicators as adapted from grade-level content, with a few marked as inappropriate for adolescents due to their elementary-level content.

Reviews were also mixed on barriers for students with different characteristics, possibly due to inconsistent LAL descriptions and lack of detail in KAA materials. Some reviewers found few or no barriers due to the individualized nature of the KAA. Other reviewers concluded that barriers existed or could not rate all items because there is no explicit discussion of accommodations, modifications, or other supports in the KAA administration materials other than the recommendation that any accommodations or assistive technology used during assessment should be the same as those used during instruction.

Finally, reviewers generally agreed that professional development materials failed to provide guidance on enhancing skills such as aligning instructional content with state standards, increasing independent responding, decreasing prompting, delivering instruction at various depths of knowledge, increasing expectations across grades, and increasing generalization of skills. One reviewer noted that the training materials were focused on assessment administration and scoring, not on broader content addressing best practices. Two independent reviewers and two members of the review team reported that assistive technology was available to students on the basis of evidence found in the evidence labels and the KAA Implementation Guide. Otherwise the only endorsed program quality indicator was that students with significant cognitive disabilities have opportunities to make choices and advocate for themselves, and this was endorsed by one independent reviewer on the basis of the clarifying examples.

The LAL review team had the benefit of previous experience with the LAL in alignment studies conducted for several other states whose AA-AAS tests vary widely. The independent reviewers provided fresh eyes on both the KAA and the LAL materials. This led to some criticisms of the LAL, particularly in levels of symbolic communication, but it also perhaps led to a more thorough analysis of the materials presented to them because they identified sources for some of their responses that were missed by the review team.

Content Expert Review

The content expert review portion of this study was conducted to evaluate the alignment of the Kansas Extended Standards with the Kansas general standards across three content areas: reading, mathematics, and science.

Twenty-four educators from across the state of Kansas were recruited to participate in this activity. These educators were divided into four teams, each consisting of four content area experts and two special educators representing elementary and secondary grade levels. This was a departure from the LAL guidelines, which call for only three content area experts. Alignment was evaluated with respect to national standard links, fidelity with grade-level content and performance, specific alignment matches between extended indicators and general indicators, differentiation of content across grade levels, and cognitive depth of knowledge of each extended indicator.

Across the three content areas, only one extended indicator in Math was unanimously determined to be foundational rather than academic. All other indicators were linked to national standards and retained for subsequent alignment activities. Reviewers then evaluated the association of the extended indicators with grade-level indicators for both content and performance fidelity. In general, Reading extended indicators were rated more positively than Math or Science indicators in that they had more near-link ratings as well as more equivalent performance ratings with grade-level standards. Reading also had the fewest extended indicators rated as having no content link and no performance fidelity with their corresponding general indicators. As a follow-up to content and performance fidelity between the Kansas Extended Standards and grade-level standards, reviewers were asked to determine which general indicators were most consistent with their referenced extended indicators by choosing a primary and a secondary match. Across all three content areas, there was a general pattern of primary matches being identified mostly at lower grades.

Reviewers evaluated differentiation of content across grades or grade bands by forming holistic conclusions about the percentage of extended indicators that represented broader or deeper content in higher grades, the presence of new skills at higher grades (as opposed to simply repeating identical skills), and the percentage of the indicators at lower grades that represented prerequisite skills for higher grades. This particular rating form, in matrix format, was confusing and unnecessarily complex. Nonetheless, reviewers concluded that Science and Reading indicators were largely identical at higher grades, with a small percentage of prerequisite skills at lower grade levels and new skills at higher grades. In Mathematics, reviewers found that the largest percentage of extended indicators represented broader application of content at higher grade levels, with the next-largest percentage measuring prerequisite skills at lower grade levels.

Based on a version of Bloom’s taxonomy modified by the authors of the LAL, review teams evaluated the depth of knowledge associated with each extended indicator. Reviewers rated the Reading, Math, and Science extended indicators at the highest cognitive level (i.e., analysis, synthesis, and evaluation) most frequently. The lowest cognitive level (i.e., attention) was not endorsed for any extended indicator in any of the three content areas. The ratings for the other four depth-of-knowledge levels varied across the three content areas.

After the review teams concluded their work, three additional alignment constructs were computed, based on the relationship of extended indicators to general indicators and the number of assessed indicators within each content area standard: categorical concurrence, range of knowledge, and balance of representation. Categorical concurrence compares the general and extended standards to determine whether students assessed on the KAA are assessed on the same content strands as students taking a general assessment; for Kansas, this relationship was strong. Range of knowledge measures the extent to which the KAA covers the content in the general standards, and this was considerably less than the recommended 50% coverage for all assessed content areas. Balance of representation looks at the coverage of the extended standards by the assessed indicators, and again this coverage was weak in LAL terms.

Curriculum Indicators Survey

The final phase of this study, the Curriculum Indicators Survey (CIS), was completed via an online survey engine by a sample of 84 Kansas special education teachers who currently taught a student participating in the KAA. The CIS assesses the enacted curriculum for these students and gathers information with regard to instructional resources and professional development.

The first part of the survey queried teachers about various aspects of their instructional practices. For instance, teachers were asked to indicate the types of instructional resources that they used throughout the school year to teach reading, math, and science to their students. For all content areas, teachers reported that they used materials or lessons from websites the most and assistive technologies the least. Settings within the school that are classified as “other” were used the most to teach reading and science, and natural settings and materials were used the most to teach math. Teachers

further indicated that they used settings within the community the least to aid in teaching the three content areas. Finally, teachers reported that they used another staff member (such as a speech therapist) the most to assist with teaching reading, other special education teachers to help teach math, and teachers from other disciplines to help teach science. Of the three content areas, teachers reported using all of the various instructional resources (materials, settings, and persons) the least in science. Teachers were also asked about their assessment practices in the three different content areas. Teachers reported using observation the most frequently and objective questions the least to assess their students in all three content areas, although there appeared to be more disagreement in science about the frequency of assessments used. Performance on demand was also indicated as an assessment that was used frequently to assess students in all three content areas. Several instructional influences (e.g., state curriculum framework or content, national content standards) were assessed by teacher respondents with regard to the degree of impact each had on their instructional program. Across all three content areas, students' needs as documented by their IEPs were the most influential factor on teachers' instruction, while national content standards were the least influential factor on instruction.

The second part of the survey required teachers to identify a target student to whom the subsequent items would apply. Target student characteristics were found to be consistent with previous classification of KAA students with respect to levels of communication. Almost 60% of target students were classified as intellectually disabled, and 74% were categorized at the symbolic level of communication.

Teachers were asked to indicate both the amount of instructional coverage that the student received on specific concepts within each content strand and the highest performance expectation (or cognitive level) they had for that student on each of those concepts. Across all three content areas, teachers frequently rated various content-specific concepts as not being covered during the current school year. However, *beginning reading* in reading and *number sense* in math were rated by the majority of teachers as being intensely covered in the instructional program. In science, only one quarter of teachers rated a single concept, *structure and energy in the earth's system*, as being taught intensely. Based on the modified version of Bloom's taxonomy, teachers most frequently indicated that their highest level of performance expectation for their target student on reading and science concepts was at the most basic cognitive level (i.e., *attention*). In math, the *performance* level of cognition was reported slightly more often

than the *attention* level. *Analysis* was reported to be the least frequent performance expectation for target students across all three content areas.

Finally, teachers were asked about the intensity of use of a variety of instructional strategies (e.g., individualized instruction, independent practice) and the level of student participation expected in these activities. Across all three content areas, *individualized instruction* was reported most frequently as receiving a considerable amount of classroom time. With respect to student participation in these activities, the level of expectation was characterized as *active with supports* most frequently for the majority of the instructional activities across all three content areas.