Alternate Kentucky Summative Assessment

2024-25 Technical Manual



Kentucky Department of

EDUCATION

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CHAPTER 1: OVERVIEW OF THE ASSESSMENT SYSTEM

Kentucky Board of Education Vision and Mission

The vision of the Kentucky Board of Education (KBE) is that each and every Kentucky learner will become a productive, engaged citizen, prepared for school, work and a happy life. Their mission is to improve the future of all Kentuckians by providing leadership, advancing policy and cultivating community partnerships *to ensure every student has equitable access to high-quality, lifelong learning*. The use of standardized state assessments is one strategy for understanding if students are moving toward attainment of the Board's vision.

Kentucky Summative Assessments

The Kentucky Summative Assessments (KSA), previously titled the Kentucky Performance Rating for Educational Progress (K-PREP) is an assessment for grades 3-8, 10 and 11. It is a criterion-referenced test (CRT) with items consisting of multiple-choice (mc), multiple select (ms), technology enhanced (te), extended-response (er) and short answer (sa). The KSA is customized for Kentucky.

Kentucky Alternate Assessment

The Kentucky Alternate Assessment Program, originally developed in 1990 because of the Reform Act of 1990, is to provide schools and programs with a valid and reliable means of assessing the instruction provided to students with moderate and significant disabilities. These students represent less than 1% of the total assessed population in Kentucky. The Alternate Kentucky Summative Assessment (AKSA) includes the Attainment Tasks (AT) for grades 3-8 and grades 10-11. Kentucky's Alternate for the college entrance exam is the Transition Attainment Record (TAR) for students in grade 11, with students able to complete at grades 12 and 14 to meet the post-secondary readiness indicator in the state accountability system. These assessments meet federal requirements for Every Student Succeeds Act (ESSA, 2015) and Individuals with Disabilities Education Act (IDEA).

Attainment Tasks (AT)

The AT are individually administered grade level content items that require students to respond to a fully scripted assessment directed by the test administrator.

Transition Attainment Record (TAR)

TAR is a rating scale that evaluates the student's readiness in reading, mathematics, and science.

The assessment and accountability model represents a balanced approach that incorporates all aspects of school and district work.

Rationale for Approach

The AT format is implemented as a way for students with significant cognitive disabilities to have access to the Kentucky Academic Standards (KAS) through engaged instruction as all Kentucky students should be provided. Unlike regular multiple-choice assessments where most students independently respond to

assessment items, assessment formats for alternate assessments are heavily dependent on teacher intervention. As such, minimizing the assessment burden on teachers is especially important.

The Kentucky Department of Education (KDE) values all students and demonstrates that by including all students in assessments and school accountability. Assessments are developed to allow all students to participate regardless of cognitive abilities, cultural backgrounds, or language development.

State Accountability Model

Kentucky's accountability system has students at its center—ensuring they are well-rounded, postsecondary ready and prepared with knowledge, skills and essential dispositions to successfully pursue the pathway of their choice after graduating from high school.

SB 158 (2020) amended KRS 158.6455, Section 1 to create an accountability system that will include an annual meaningful differentiation of all public schools in the state using multiple measures that describe the overall performance of each district, school, and student demographic group. Results are reported in an online Report Card including disaggregation of individual student group data and include reported-only measures.

This more robust next-generation model also includes student achievement growth measures, emphasis on college and career readiness, high school graduation rates, student achievement in writing and social studies, and increased focus on the lowest-performing schools. Additionally, the new accountability model holds all schools and districts accountable for improving student performance and creates five performance levels that determine consequences and guide interventions and supports. School and district classifications are based on an exclusive list of six state indicators that measure school performance: State Assessment Results in reading and mathematics

- State Assessment Results in science, social studies, and writing
- English Learner Progress
- Quality of School Climate and Safety
- Postsecondary Readiness (high school only)
- Graduation Rate (high school only)

The Alternate KSA is fully represented within Kentucky's Accountability System. Table 1 identifies how these components are represented for both the Alternate KSA, KSA, and other indicator measures.

Table 1: Overview of the Assessment System

Indicator	Data Source	Notes
State Assessment Results in Reading and Mathematics	Alternate KSA (Attainment Tasks) in reading and mathematics	
State Assessment Results in Science, Social Studies, and Writing	Alternate KSA (Attainment Tasks) in science, social studies, and writing	
Quality of School Climate and Safety	Quality of School Climate and Safety Survey (The survey is modified for students in the Alternate Assessment program.)	

English Learner Progress	Alternate ACCESS	
Postsecondary Readiness (Students earn credit for demonstrating academic or career readiness.)	Academic Readiness Benchmarks from Transition Attainment Record at grades 11 (and or grades 12 0r 14) ***Reading-18 Mathematics-13 Science- 16 Career Readiness The Career Work Experience Certification (CWEC) is a sequence of four courses with work experience embedded within the pathway. The CWEC is one of four components of the Kentucky Alternate Assessment. The achievement of the CWEC is a process, not an assessment. The CWEC along with the Employability Skills Attainment Record (ESAR) is designed to provide a measure of career readiness within the Postsecondary Readiness component of Kentucky's Accountability System.	High School Only
Graduation Rate	Students are included in 4- and 5-year cohort calculations. Federal guidelines do not identify an Alternate Assessment student as meeting requirements for a regular diploma.	High School Only

**Transition Attainment Record (TAR) Reading score includes Reading/Language Arts content areas.*

Alternate KSA Advisory Board

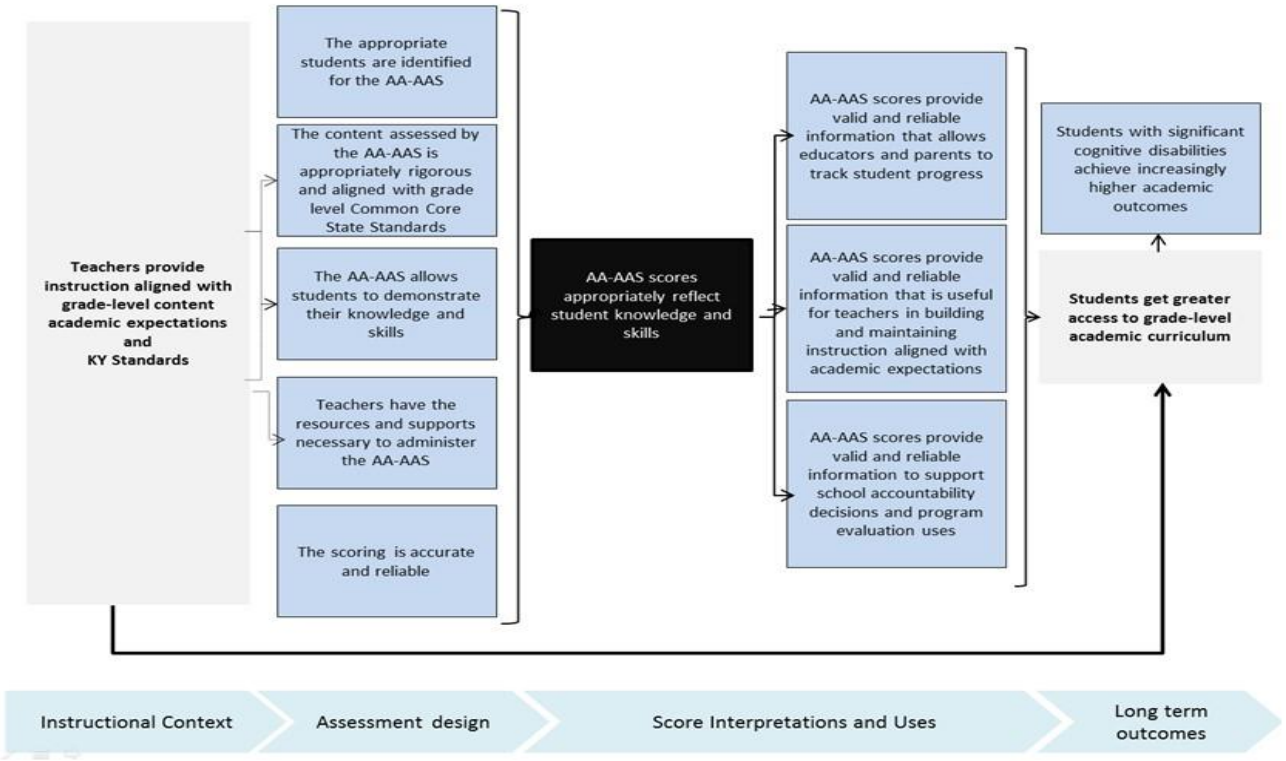
The Alternate KSA convenes an annual advisory board with stakeholders from across the state including teachers serving this population, regional support representatives, and administrators. The advisory board advises development and implementation of the Alternate KSA.

Theory of Action for the Alternate KSA

A Theory of Action (TOA) was developed to focus elements for the validity argument. The TOA displays the claims that will be made about the system and is divided into components that are the focus of the Alternate Kentucky Summative Assessment (AKSA) including instructional context, assessment design, implementation, and appropriate use of results – that lead to short-term assessment outcomes and long-term student outcomes. See Figure 1 for graphic illustration of the Theory of Action.

The TOA starts with the assumption that there are pre-requisites to deliver quality instruction to students with significant cognitive disabilities that are linked to grade specific academic standards. For the assessment system to produce valid and useful results, students participating in the Alternate KSA must be appropriately identified, their instruction must be aligned with the content assessed, and the AKSA must be administered as intended.

Figure 1: Theory of Action for Alternate KSA



CHAPTER 2: PARTICIPATION

This section describes the policy and procedures for correctly identifying participants for the alternate assessment and the characteristics of those students. Monitoring characteristics of alternate assessment participants as the population has a wider range of knowledge and skills as well as characteristics that may need accommodations to participate meaningfully. Matching the assessment design with the population is an important feature of validity (Pellegrino et al., 2001).

Participation Policy and Procedures

The following participation criteria were updated in 2018 and are now included in **Kentucky Statutes 703 Kentucky Administrative Regulation (KAR) 5:070**. In response to the ESSA requirement to limit the participation in alternate assessments to 1% and maximize participation in the state's general assessment; the KDE convened an expert panel, reviewed the participation guidelines, developed training materials for IEP teams, and conducted monitoring visits to assist districts in identifying the population of students who should participate in the alternate assessment. In addition, access to a high school diploma was also provided as required by ESSA.

Participation Guidelines

The KDE distributes multiple documents related to the 1% as required by ESSA. IEP teams utilize the Participation Guidelines documents and the Parent Guidance document that are provided below. The 24-25 Waiver Request is also provided below.

1) **Participation Guidelines Documents**
2) **Parent Document for AKSA**
3) The 1% Request **ESSA Waiver Request**

Participation Rate for 2024-25 Administration

The total number of student participants in 2024-25 Alternate KSA according to the AKSA Technical Yearbook in Appendix G. was 4,244 for Reading, 3,656 for Math, and 1,173 for Science. The AKSA participation percentage of 1.3for Reading and 1.3 for Math of the total assessed population in Kentucky. Table 2 below describes the population by content area in terms of the total population of eligible students assessed in the Alternate KSA and the resulting participation rate.

Table 2: Eligible* Participation Rates 2024-25

Content Area	Number Eligible Alternate KSA	Participation Rate
Reading/Language Arts	**4,244**	**1.3**
Mathematics	**3,656**	**1.3**
Science	**1,173**	**1.2**

*

With the implementation of the ESSA 1% policy, current student participation in Kentucky's Alternate KSA has represented approximately 1.3% of the total assessed population.

Table 3 provides participation by student ethnicity, gender, English Learner and economic status for Alternative KSA Participants in Reading, Math, and Science. The actual number of students participating versus those who are eligible to participate varies slightly but is not significantly different from those eligible to participate reported in Table 2.

Table 3: Actual Participation Diversity AKSA

Student Group	Participation Reading	Participation Math	Participation Science
African American	12%	12%	11.3%
Hispanic	8%	8%	7%
White	73%	72%	70.5%
Other	8%	8%	8%
Male	68%	67%	66%
Female	33%	28%	30%
English Learner	7.3%	6.7%	6,5%
Econ Disadvantaged	77.4%	76%	75%

Alternate KSA Learner Characteristics

In addition to these participation guidelines, the Kentucky Department of Education conducts an annual survey of characteristics of the learners who participate in the Alternate KSA. The Learner Characteristics Inventory (LCI) (Kearns et al., 2006) includes items related to the characteristics of students participating in alternate assessments as an important validity indicator (Pellegrino et al., 2001). Currently, the KDE collects data annually using 7 items from the LCI (Kearns et al., 2016) through an electronic portal. The LCI can be found in **Appendix A**. The LCI data allows the KDE to monitor the characteristics of the Alternate KSA population. The inventory samples expressive and receptive communication, mobility, engagement, service delivery placement, as well as one reading and one math item. The student's teacher or the IEP team completes the inventory for each student.

The data from the Learner Characteristics Inventory collected in Kentucky resembles LCI data from other states (Kearns et al., 2011) and large assessment consortium (Towles-Reeves et al., 2012). The student population characteristics for 204-25 included: IDEA label, expressive communication, receptive communication, Augmentative Alternative Communication (AAC) Use, social engagement, educational placement, health/attendance, and two related to current performance in Reading and Math. **Table4** summarize the LCI data.

Table 4: Alternate KSA Learner Characteristics

IDEA Label, Receptive Communication, Social Engagement

IDEA Label	Intellectual Disability	Multiple Disabilities	Autism	Other
	40.9%	15.4	41.57	2.54%
Receptive Communication	**Follows Directions**	**Requires Cues**	**Alerts, Requires Assistance**	**Uncertain Response**
	28.7%	60.51%	9.3%	1.46%

Social Engagement	Initiates and Sustains Social Interactions	Responds to social interactions	Alerts to others	Does not alert to others
	40.51%	46.67%	12%	.73%

Educational Placement, Health/Attendance, Reading Performance, Math Performance

Educational Placement	Special Classroom only	Special Classroom with General Education 61%	Resource Room	Inclusive Classroom	Special School
	Blank	89.10%	6.68%	>1%	3.95%
Health / Attendance	Regular Attendance 90%	Regular Attendance 75%	Attendance 50%	Home Bound health related	Homebound not health related
	85.28%	9.36%	1.43%	2.77%	1.16%
Reading Performance	Fluent Reader interprets passages	Fluent Reader short passages literal understanding	Reads basic items simple sentences	Uses pictures to tell a story identifies sight words	No observable awareness of print or braille
	1.11%	13.14%	42.94%	27.27%	15.54%
Math Performance	Applies Computational procedures	Does basic computational procedures with or without a calculator	Counts with correspondence	Counts by rote	No observable awareness
	1.27%	40.23%	32.08%	10.19%	16.23%

Expressive Communication

Expressive Communication	Symbolic Language	Emerging Symbolic	Pre-Symbolic
	66.94%	23.55%	9.51%

Augmentative Alternative Communication

AAC Use	Yes	No
	34.53%	65.47%

Learner Characteristics Inventory

Students who participate in the Alternate KSA represent approximately 1.3% of the total assessed population. Among this very small population of students with disabilities, 3 disability categories are represented including intellectual disabilities, autism, and multiple disabilities.

Participants that communicate primarily with symbolic language using words, oral speech, or Augmentative Alternative Device (AAC) make up 66% of this population. Approximately 23% are emerging in the use of symbols words, and 9.5% do not currently use symbols to communicate. Symbolic language use and support is essential for meaningful participation in academic content.

Receptive language or understanding directions/sentences/words is necessary for following assessment administration. Currently most Alternate KSA participants require additional cues to follow directions or are independent in following directions. While approximately 9.3% need significant support to follow directions and 1.46% have uncertain responses to directions.

Most Alternate KSA participants attend school regularly, although approximately 2.59% have irregular attendance or receive homebound instruction. Most students receive special education services in self-contained classrooms with some inclusion for music, art, and physical education. Very few students receive services in supportive inclusive grade-level classrooms. Student skills in Reading and Math include reading basic sight-words and reading short passages with literal interpretation, basic math computation with a calculator or simple counting with correspondence. Approximately 15% of students in Reading and 16% in Math have no observable skills in those academic areas.

Implications of Learner Characteristics

The Learner Characteristics for the population of students participating in the Alternate KSA do resemble characteristics of students cited in previous studies (Kearns et al., 2011; Towles-Reeves et al., 2012) about this population. While these students do have intellectual disabilities, communication is essential for access to the general curriculum. Most students use symbolic language to communicate but 24% are emerging in their use of symbolic language and about 34% have access to Augmentative Alternative Communication devices to communicate which is an increase from previous years. This communication deficit, however, significantly impacts participation in curriculum activities.

Finally, most of the population have very basic skills in Reading and Math that are not necessarily aligned to grade-specific content at the assessed grades.

CHAPTER 3: CONTENT STANDARDS

Content Standard Regulations/Procedures

KY Senate Bill 175 (2019) calls for the Kentucky Department of Education to implement a process for reviewing all academic standards and aligned assessments beginning in the 2017-18 school year. The current schedule calls for one or two content areas to be reviewed each year and every six years thereafter on a rotating basis. The rotation schedule began in the summer of 2017 by soliciting feedback on English/Language Arts, Mathematics, and Health/Physical Education standards. The Kentucky Academic Standards review process regulations can be found on the KDE's website.

Advisory Panels (APs)

Advisory panels for each content area review the standards and assessments and make recommendations for changes to Standards and Assessments Review Committees. APs will consist of at least six public school educators who teach the content standards being reviewed along with a representative from an institution of higher education in Kentucky for each grade band: elementary (K-5), middle (6-8) and high school (9-12).

Standards Review Committees (RCs)

The Standards and Assessments Review Committee for each content area reviews findings, including public comments/feedback, and makes recommendations to revise or replace existing standards and review assessments to ensure alignment with the standards. A minimum of six public school educators who teach in the academic content area being reviewed, at least one representative from higher education, as well as other community shareholders comprise each committee.

Standards and Assessments Process Review Committee (SAPRC)

The Standards and Assessments Process Review Committee is made up of the Commissioner of Education, or his designee, as a non-voting member and nine voting representatives of public schools including two parents of public-school students, one language arts teacher, one math teacher, one science teacher, one social studies teacher, two principals, two superintendents, and one school board member appointed by the Governor and confirmed by the Senate. The SAPRC reviews the process to ensure shareholders had adequate opportunity for input. If the process is found sufficient, the recommendations (without amendment) go to the KBE for consideration. If the process is found to be deficient, the recommendations may be returned to the appropriate standards and assessments review committee for additional work.

Once the KBE approves the revised standards and they clear the traditional regulatory review process, which provides an additional opportunity for public input, they will be implemented in all Kentucky public schools no later than the second academic year following the process. Existing standards will stay in place until new standards are approved.

Content Standards

The Kentucky Academic Standards contain the minimum required standards that all Kentucky students should have the opportunity to learn before graduating from Kentucky high schools. The standards

address what is to be learned, but do not address how learning experiences should be designed or what resources should be used. Please visit KYstandards.org to access KAS documents and resources for implementing the KAS.

Reading and Writing Standards (Adopted 2019)

Mathematics Standards (Adopted 2019)

Science Standards adopted for the Assessment for 24-25.

Standards Training

The KDE Standards Website includes modules to support teacher training on the content standards.

Teacher Training on Content Standards

In addition, Kentucky Regional Education Cooperatives provide teacher training on implementation and curriculum development using the content standards for the Alternate KSA for both general and special educators. The links below to AKSA Targets and Resources provide standards progressions for all content areas.

Standard Prioritization

Teachers serving this population and content teachers from across the state prioritize 10 Kentucky Academic Standards per content area in Reading and Math per grade, based on instructional significance. These standards form the foundation for the development of the assessments for students who participate as part of the Kentucky Alternate Assessment. Science standards were approved in 2022 and will be assessed in 2025-26 in the Alternate KSA. Six standards were chosen for Writing.

Alternate Assessment Targets

The Kentucky Academic Standards are the foundation and focus for content and the development of state summative assessments. However, there are times when test development occurs where the need to reduce the depth and breadth of a standard is necessary. The requirement to maintain content alignment based on the grade level standard is non-negotiable, but the ability to reduce the complexity of the standards initial foundation for assessment purposes is often considered. This process does not create a new standard, but in this case develops an Alternate Assessment Target. The current definition of an Alternate Assessment Target is provided below:

Alternate Assessment Targets: (not a content standard)

An Alternate Assessment Target represents limits to a selected Kentucky Academic Standard. An Alternate Assessment Target may reduce parts of the standard with specific guidance to what an assessment item could represent. Not all Kentucky Academic Standards selected for assessments will have an Alternate Assessment Target and may display the language: "No limitations". All parts of the Kentucky Academic Standard are eligible to be included as an assessment item." This would mean that the entire standard in its original form is reduced in depth and breadth and is eligible in its entirety to be used in the development of assessment items.

Links to Assessment Targets and Learning Progressions

AKSA Targets and Resources
Math Targets
Reading Targets
Science Targets
Writing Targets
Grade 4 Science
Grade 7 Science
Grade 11 Science
Social Studies Targets
Standards Progressions 20-21

Resources for Families

Resources supporting family understanding of the content standards can be found on the Kentucky Standards website. The standards for each grade are presented in separate documents in both English and Spanish.

Grade 3 Family Example

CHAPTER 4: TEST DEVELOPMENT

Test Design Overview

The Alternate KSA test design features 6 sets of 5 scenario related multiple-choice items designed based on the Test Blueprint. The items are individually administered by a qualified assessment administrator (e.g., trained teacher) and administered in Fall and Spring testing windows. The two windows reduce the number of items that need to be administered at one time to address the characteristics of the learner and the time availability of the test administrator.

Each task contains five related multiple-choice items based on a scenario presented at the beginning of the task. Illustrated response options are presented for each of the items. The response options include one correct answer and two distractors. In some instances, additional materials such as maps, graphs, equations, or sentence templates are provided for use in the administration of the task. In addition, reading items include a text. Each passage has a corresponding illustrated story board. The individual illustrations in the story board are numbered, and these numbers are entered at the appropriate place in the passage in the form of superscript numbers to cue the administrator to present or indicate the appropriate illustration as needed.

Test Blueprint Policy and Procedures

KRS 158.6453 calls for the Kentucky Department of Education to implement a process for reviewing all academic standards and aligned assessments with one or two content areas to be reviewed each year, and every six years after that on a rotating basis.

Throughout the months of July 2019 to August 2020, KDE aligned assessment blueprints to the newly adopted standards in Reading/Writing, Mathematics, and Social Studies. The KDE releases the blueprints listed below as a resource for curricular and instructional decisions for schools.

Test Blueprint

The Alternate KSA Blueprint development begins with a review and prioritization of the content standards (See Chapter 2) at each grade by stakeholders to ensure that the standards included in the Blueprint for the Assessment targets identified in the standards prioritization process follow a learning progression framework (Hess, 2007) and identify assessment targets used in item development. Alternate KSA are appropriately aligned to the KY Assessment Blueprint, ensuring that the content standards follow a learning progression across grades and represent essential learning targets for learners who need additional time and support for learning to be most effective.

The Alternate KSA Blueprints include the standards across the content areas in Reading, Mathematics, Science, Social Studies, and Writing. Each content area includes the key domains in the content area, the percentage of each key domain, and the number of standards represented in the domain to match the general education test blueprint percentages as closely as possible.

The Reading content area includes 10 content standards matching the blueprint for the general assessment. Emphasis varies slightly in the number of standards per domain across grades, but the percentages remain consistent across the domains. From these 10 standards, thirty items are developed and administered in two assessment windows. Table 5 below is the blueprint for reading.

Table 8: Alternate KSA Blueprint for Reading

Grades 3, 4, and 5 – Domain

Grade & Number	Grade 3	#	Grade 4	#	Grade 5	#
Key Ideas and Details	30-35%	4	30-35%	3	30-35%	3
Craft and Structure	30-35%	3	30-35%	4	30-35%	3
Integration of Knowledge and Ideas	30-35%	3	30-35%	3	30-35%	4

Grades 6, 7 and 8

Grade & Number	Grade 6	#	Grade 7	#	Grade 8	#
Key Ideas and Details	30-35%	3	30-35%	3	30-35%	3
Craft and Structure	30-35%	3	30-35%	3	30-35%	4
Integration of Knowledge and Ideas	30-35%	4	30-35%	4	30-35%	3

Grade 10

Grade % and #	Grade 10	#
Key Ideas and Details	30-35%	3
Craft and Structure	30-35%	4
Integration of Knowledge and Ideas	30-35%	3

In the area of Mathematics, five domains are represented in the blueprint with 10 standards associated across the entire blueprint. The number of standards varies slightly by domain and grade. Domains in Grades 3 – 5 consider Operations and Algebraic Thinking and Numbers and Operations in Base Ten and Numbers and Operations in Fractions are weighted more heavily in the target percentage representing 8 standards, while the areas of Measurement and Data and Geometry represent 10-15% or 15-20% of the content and represent 2 standards.

For Grades 6 and 7, the domains focus on Ratios and Proportions, The Number System, Expressions and Equations, Geometry, and Statistics and Probability. Similar distributions of the number of content standards across the domains and the percentage of weighting.

While the domains represented in grades 8 and 10 are slightly different, the number and distribution of the standards are similar with emphasis on Expressions and Equations, Functions, and Geometry. The representations are illustrated in Table 6 below.

Table 6: Alternate KSA Blueprint for Mathematics

Grades 3, 4, and 5

Grade & Number	Grade 3	#	Grade 4	#	Grade 5	#
Operations and Algebraic Thinking	25-30%	3	15-20%	2	15-20%	2
Number and Operations in Base Ten	15-20%	2	25-30%	3	25-30%	3
Number and Operations - Fractions	25-30%	3	25-30%	3	25-30%	3
Measurement and Data	15-20%	1	10-15%	1	10-15%	1

Geometry	10-15%	1	10-15%	1	10-15%	1

Grades 6 and 7

Grade & Number	Grade 6	#	Grade 7	#
Ratios and Proportional Relationships	10-15%	1	20-25%	2
The Number System	30-35%	3	15-20%	2
Expressions and Equations	25-30%	3	20-25%	2
Geometry	10-15%	1	20-25%	2
Statistics and Probability	20-25%	2	20-25%	2

Grade 8

Grade & Number	Grade 8	#
The Number System	10-15%	1
Expressions and Equations	25-30%	2
Functions	25-30%	3
Geometry	25-30%	3
Statistics and Probability	10-15%	1

Grade 10

Grade & Number	Grade 10	#
Number and Quantity	10-15%	1
Algebra	22-27%	3
Functions	22-27%	2
Geometry	25-30%	3
Statistics and Probability	10-15%	1

Blue Print for Science Targets

Elementary, Middle and High School BLUEPRINT

Assessments are based on *the Kentucky Academic Standards (KAS) for Science*.

Science Assessment Blueprint

The Blueprint has dual purposes. It provides targets for test development and information to teachers as they make instructional decisions.

This blueprint outlines how the items/clusters are distributed for test construction within each of the assessment grade spans. Because the standards within the *KAS for Science* are categorized by domain (life, earth & space, physical, engineering design) this familiar classification was also chosen to use in determining the categories for this assessment blueprint.

It is important to note that the three-dimensional nature of the *KAS for Science* remains unchanged, so the Science and Engineering Practices and Crosscutting Concepts associated with the standards within each domain will continue to be assessed through multi-dimensional questions organized around phenomena. Classification by science domain should not be perceived as an indication that only Disciplinary Core Ideas will be assessed.

Note: The Engineering Design category refers only to those standards labeled as ETS1: those standards identified with an asterisk (*) as incorporating engineering design are counted within their primary domain classification.

Grade 4

Domain	Target %
Physical Science	30-45
Life Science	20-35
Earth and Space Science	25-40
Engineering Design (ETS1) for grades K-2 and 3-5	5-15

Grade 7

Domain	Target %
Physical Science	35-50
Life Science	15-30
Earth and Space Science	20-30
Engineering Design (ETS1) for grades 3-5 and MS	5-15

Grade 11

Domain	Target %
Physical Science	20-35
Life Science	30-45
Earth and Space Science	20-35
Engineering Design (ETS1) for MS and HS	5-15

Assessment Blueprints for Social Studies, Editing and Mechanics, and On-Demand Writing are found in **Appendix B**.

Item Development Procedures

KY Senate Bill 175 (2019) requires stakeholder participation in all aspects of item development. Stakeholders (e.g., special education teachers and content area experts) develop the items based on the test blueprint with assistance from content experts at the Kentucky Department of Education.

Stakeholder recruitment considers statewide representation and diversity, content expertise, and population expertise. Item stakeholders receive training in item development prior to participating in item writing. Items are then reviewed for Bias and Sensitivity, see Chapter 5 of this document. In addition to the stakeholder content alignment review, KDE content experts review the assessment items for content alignment.

Stakeholder Item Development

Stakeholders convene to develop items for Reading, Writing, Mathematics and Social Studies. Stakeholder meetings are held online to accommodate teacher participant schedules. The stakeholder diversity is representative of the state geographic locations, approximately 20% were from urban areas, 30% from suburban areas, and 50% from rural areas of the state. Most of the stakeholders were female, reflecting the population of teachers serving this population. Cultural diversity includes approximately 25% representing diverse populations, while approximately 75% are identified as Caucasian.

Item Writing Training

Item writers receive training (See **Appendix C** for item writing training) to write scripted item sets (tasks) to the Kentucky prioritized academic content standards in each content area. Each task contains five related multiple-choice items based on a scenario presented at the beginning of the task. The response options include two distractors and one correct answer. All attainment tasks include directions for test administrator to facilitate the standardization of the administration process. During the initial item writing phase, 30 items (or 6 tasks) were written per grade per content area tested.

Upon completion of the draft items, the items are entered into a template and illustrated. Illustrated response options are presented for each of the items. In some instances, additional materials such as maps, graphs, equations, or sentence templates are provided for use in the administration of the task. In addition, reading tasks include a passage and a corresponding illustrated story board. The individual illustrations in the story board are numbered and these numbers are entered at the appropriate place in the passage in the form of superscript numbers to cue the administrator to present or indicate the appropriate illustration as needed.

KDE Content Expert Review

Once the task is in the template with appropriate illustrations, KDE's Office of Teaching and Learning conducts a review to ensure content alignment. Then another stakeholder group of general and special educators convene for a final content review. A second group of stakeholders is convened for a bias review. The debrief meeting for both groups occurs simultaneously so the two groups can discuss potential issues and resolve any concern.

Item Writing Content Review

Stakeholders including content experts and special educators were convened to review the new items to ensure accurate alignment to the content standards in Reading, Mathematics, Social Studies, and Writing. Approximately 30 experts were convened representing regions across KY including equal representation from urban and suburban areas with the majority from rural areas.

Training to review the content items is provided. Stakeholders receive training about the assessment item design, appropriate accommodations, population, and specific instructions related to the content review. Stakeholders review all components of the item including supplemental materials, illustrations, scripts, animations, etc. Participants consider the following components:

- Content is represented appropriately,
- Content is aligned to the content standards,
- Application of knowledge and skills,
- Age/grade appropriate language and processes,
- Essential practices.

The reviewers examined 6 sets of 5 items for each the 6 content standards at each grade level 3 – 8 10 & 11 in reading, mathematics, social studies and writing. This represents a total item count of 600 items being prepared for field testing during this accountability cycle.

Participant Process Evaluations

Following the completion of the item review, participants evaluate the process. The evaluation considers participation, meaningful engagement, and valued contributions. Participants rated the item review process as conducive to high quality items.

Bias and Sensitivity Review

All assessment items are subjected to Bias and Sensitivity reviews per Senate Bill 175 (2019). Bias is defined as non-curriculum-relevant factors that tend to lower scores on a particular item. Sensitivity is defined as non-curricular-relevant issues that may offend or dismay significant numbers of students. Bias and Sensitivity reviews are conducted on all new items. As noted previously in the section entitled "Assessed Population," the diversity of the population is such that it is necessary to consider bias in terms of specific characteristics of the population. All existing items are reviewed annually for alignment, Bias and Sensitivity, and relationship to the Performance Level Descriptors in the Achievement Standards.

Stakeholder Recruitment

Stakeholders are recruited for the Bias and Sensitivity Review to represent diversity, state geographical representation, as well as educators with experience in teaching the population of students participating in this assessment. Stakeholders receive training about content bias and sensitivity prior to conducting the review. The recruitment process resulted in 44 bias reviewers (approximately 5-6 participants per content area and grade band (e.g., elementary, middle, and high school).

Bias Review Results

Items are identified for the following reasons: content concerns, bias and sensitivity concerns, identified by multiple panelists, or listed as a concern multiple times by one panelist. Some items were deemed appropriate by the panelists following the discussion. All items that panelists found to be a concern of bias or sensitivity after group debrief discussions were resolved. Finally, some revisions were simple typographical errors.

The Bias and Sensitivity Review for 2024-25 included 30 items in grades 4, 7, and 11in two content areas – Science and Writing. Five items were reviewed for Reading in grades 3,4,5,6,7,8 and 10. Five items were reviewed for Math in grades 3,4,5,6,7,8 and 10. Five items were reviewed for Social Studies in grades, 5,8, and 11.

Procedures and Training

Stakeholders convene via distance technology to review items for bias at each grade level. Stakeholders receive training about assessment item design, appropriate accommodations, population, and specific instructions related to the bias review. Stakeholders review all components of the item including supplemental materials, illustrations, scripts, animations, etc. Participants consider the extent to which:

- The content of the items does not intrude on the privacy of the values and beliefs of students or their families, or offend students, parents, or the public of Kentucky.
- The items approach issues and/or themes in a manner that does not demean, offend, or inaccurately portray any race, ethnicity, religious group, disability, culture, gender, social group, or region.
- The items avoid topics that arouse strong emotions unless those topics are curriculum relevant.
    - Interfere with students understanding of the item
    - Interfere with student performance
    - Confuse the messages about the content standards and assessment.

Participants consider all five items and the supplemental materials for each of the seven questions on the survey. The process is then repeated for all test items in each task. Each task consists of five items.

The survey items consider the extent to which the content of the items provided with a fair opportunity for students to demonstrate knowledge regardless of race, ethnicity, gender, religion, disability, socioeconomic status, or geographic region in which they live. Specifically:

- What is being assessed with this item?
- Is this a topic that should be used to assess content on a state assessment?
- How might the item and related materials affect a child who has recently had a personal experience with this content?
- Will the related materials, graphics/passages be perceived as biased or offensive?
- Is the treatment of the topic in the passage appropriate for the age/grade level of the student?
- Are there alternative assessment items that do not include sensitive issues?

Following completion of the survey, participants in the bias review convene with the content review participants via distance technology to discuss their responses and identify concerns with the items and any suggested revisions that might be needed.

Participant Process Evaluations

Following the completion of the item review, participants evaluate the process. The evaluation results suggest that participants strongly agreed or agreed that they were able to openly ask questions and discuss thoughts, their opinions were valued, they were able to contribute to the discussion and were able to effectively communicate their concerns. Participant comments in the evaluation often reflect positive participation. **See Content and Bias Report in Appendix D.**

Field Test

New items as described above were administered following the administration of the 24-25 items in both the Fall and Spring testing windows of 24-25 in all content areas. A Flagged Item Review was conducted by an outside vendor to determine the statistical analysis of response patterns. Then a stake-holder review is conducted to interpret the flag on each item. Item revisions are made based on stakeholder interpretations in the flagged item review.

Flagged Item Review in Appendix E

CHAPTER 5: STANDARD SETTING

Equipercentile Linking

Classification into performance levels requires a standard setting process for new tests. Standard setting establishes the minimum scores necessary to be classified into each performance level (i.e., cut scores). Because the Covid pandemic caused problems with attendance resulting in cancellation of the field test in 2020-21 and a request for the waiver of federal accountability requirements in 2020-2021, KDE decided to postpone formal standard setting until after the Spring 2022 administration, at which time it could be expected that the full student population (with few exclusions) will be tested. This ensured that the standards of student performance going forward are based on representative student data from a more typical school year.

To allow for the reporting of comparable proficiency level classifications in Spring 2021, HumRRO proposed conducting an equipercentile linking process (Kolen & Brennan, 2004) to identify cut scores for classifying students into Novice, Apprentice, Proficient, Distinguished levels.

The purpose of this task was to implement a sound methodology for identifying performance level cut scores on an operational field test. An equipercentile linking approach enabled KDE to use past statewide performance to determine cut scores that would result in a reasonable distribution of students across the four levels of student performance. A full report for Equipercentile linking conducted in 2024-252 can be found in **Appendix E**

Standard Setting Methodology

The ***Modified-Angoff*** standards setting method (Angoff, 1984) is a procedure where stakeholders use their professional judgment to determine how much is just enough for a student's score to be considered "just barely" minimum performance. Minimum performance is determined for each performance level (Novice, Apprentice, Proficient and Distinguished) as described in the Performance Level Descriptors. When the minimum cuts are determined for each performance level, then a range is also determined. Stakeholders use both Performance Level Descriptors and assessment items to make these determinations for the Alternate Kentucky Summative Assessment.

The ***Modified-Angoff*** method involves three rounds of work. In round one, stakeholders individually review and rate the items for the top three performance levels (Apprentice, Proficient, and Distinguished), beginning work with Proficient. The stakeholders review each question and ask themselves, "Would a student who is 'barely proficient,' be able to answer this question correctly?" Each participant responds "yes" or "no" to that question. Once they have rated all items for proficiency, the process begins again with ratings for "barely apprentice" using the same criteria. Finally, participants review the questions for a third time and rate each item for "barely distinguished." Once all participants have reviewed and rated all items for Proficient, Apprentice, and Distinguished performance levels, the facilitator reviews the data and leads a large group discussion about the item ratings. This includes the range of "yeses" at each performance level and discussions of item discrepancies across panelists.

Upon completion of group discussions, each panelist reviews all items independently for a second time. During this independent review, panelists may consider feedback from other panelists for their independent ratings. Once all participants have reviewed and rated all items for a second time the facilitator reviews the data and leads another large group discussion following the steps of the first discussion.

The third and final round is a discussion between panelists where they make recommendations about the number of correct items required for each performance level based on their independent ratings and group discussions. A consensus is not required; however, a simple majority of the group must agree. During the third-round discussion, the stakeholders will receive impact data on their recommendations and review score distribution based on the recommended cut scores and discuss one more time. The groups make final cut score recommendations for the grade level. This process is repeated for each grade that a stakeholder group is setting standards.

Selection of Standard Setting Participants

The standard setting participants are selected from a pool of qualified content experts in Reading, Writing, Mathematics, Science and Social Studies and special education teachers who are knowledgeable and/or have direct experience with the range of students who participate in the Alternate KSA assessment. Consideration is also given to diversity and geographical representation across Kentucky. Teachers and content experts could self-nominate or be nominated by their principal, special education director, superintendent, or other knowledgeable official. Each nominee is required to be a current district or state employee with verifiable experience.

Training

Online training was recorded and provided to all participants in advance of the standard setting session. The training provides background information including role and purpose of the panelists, what the alternate assessment attainment tasks are, what they look like and how they are scored, who the student population is and allowable accommodation, as well as the previous steps taken (e.g., content and bias review committee meetings) previously.

Panelists learn the difference between content standards and achievement standards. Additionally, they are introduced to the Kentucky Alternate Assessment Performance Level Descriptors. Next, panelists are introduced to the ***Modified-Angoff*** (1984) method and the process they will be using for the day. Within the training there are video clips to help panelists understand the concept of borderline performance and the importance of using their professional judgement.

The final step in the training process is an introduction to the secure online site where they record their ratings. Screen shots of the forms are shared with the panelists along with an explanation of how to find the rating forms, the Performance Level Descriptors, and the assessment items.

Performance Level Descriptors

The instructional program promotes learning in the general curriculum as there is only one set of content standards in Kentucky. Performance level descriptors are written specifically to reflect the content performance requirements of the AKSA. These descriptors list skills and concepts that a student scoring on the low end of the cut score meets a particular performance level (Novice, Apprentice, Proficient or Distinguished) can demonstrate. The Performance Level Descriptors are written during Content Committee meetings involving general education and special education stakeholders with expertise in Reading, Writing, Mathematics, Science, and Social Studies at grades 3–8 and high school.

Prior to commencing the standard setting work, all content area stakeholder groups were asked to review and vet the Performance Level Descriptors for each grade in their content area grade band as well as the

grade just before and/or just after (e.g., elementary reading reviewed grades three through five as well as grade six – the next immediate grade in the progression).

Performance Level Descriptor Links

Third Grade
Fourth Grade
Fifth Grade
Sixth Grade
Seventh Grade
Eighth Grade
Tenth Grade
Eleventh Grade

Procedures

All meetings are held via distance technology. Prior to making any ratings, facilitators review the process. Facilitators ensure access to the content standard documents, the Performance Level Descriptors, the assessment items for the correct grade/content, and access to their rating forms. Facilitators assign panelists unique rater identification numbers to use during the process, which allow for anonymity during group discussions when facilitators share panelist ratings. Panelists can only see their own rating; however, facilitators watch the ratings in real time to ensure there was no confusion.

Only one grade per content area is reviewed and discussed per day per panelist group. As discussed above, panelists review all items independently three times, once for each performance level of Proficient, Apprentice, and Distinguished. When all panelists complete their independent review, the facilitator leads a large group discussion looking at ranges and discrepancies across panelists. Upon completion of the first-round discussions, panelists repeat the process for round two. During round three, panelists agree to description recommendations, review impact data and make final recommendations

CHAPTER 6: ADMINISTRATION AND SECURITY

Procedures for Administering the Assessment

The tasks must be administered by a certified staff member (e.g., teacher, counselor, related service provider, etc.). The test administrator must qualify by completing the Attainment Task online training and the qualifying quiz.

The task is scripted and is to be read to the student as written or using acceptable adjustments as described in the *Steps to Administrating* section. "Quotation marks" signify the scripted portions to be read to the student.

The task may be administered in more than one session, allowing for a smaller amount of time for each session. One content area may be administered to an individual student each day. A five-minute break is allowed between each section of the item sets and is noted in the testing materials. If a student is having difficulty attending, is having medical or behavioral difficulties, the task can be stopped within a section. Then resumed at the point stopped during the prior session. The administrator can orient the student to where he or she was in the process.

Teacher Training

All teachers must complete the Administration Code Inclusion training, and alternate assessment training following state and district procedures. A mandatory online training and qualifying quiz is required of all certified personnel who plan to administer the Alternate KSA. There is an administration guide and a qualifying quiz for the Alternate KSA; the Administration Guide Overview, as well as the administration manuals are all available as downloadable online resources. Once the administration materials are posted, they remain online for the remainder of the accountability cycle.

Administration Security and Quality Control

The Alternate KSA is considered secure testing material and must follow the administration code and 703 KAR 5:070 established for the general assessment. The following is information from the administration code training that is adapted to address the Alternate KSA.

District Assessment Coordinators, administrators, and teachers must ensure the security of the assessment materials before, during, and after test administration. When not being used for testing sessions, all attainment tasks and materials shall be stored in a secure location with access granted to authorized personnel only.

A detailed list of practices that are appropriate for test administration and practices that are not appropriate for Alternate KSA administration are provided in the Administration manual.

Test Security

Test security of the Alternate Kentucky Summative Assessment is implemented throughout the development, storage, and delivery processes. Through training, software protocols, documentation, and secure storage, access to the assessment is limited to project personnel and is role-based in that access is provided on a need-to-know basis.

All personnel involved in the development of AKSA receive training specific to their role in development. In the training they are instructed in the use of the UK AKSA SharePoint site and general rules involving test security and confidentiality. All participants in the development of the AKSA that are not University of Kentucky (UK) employees are required to sign a non-disclosure agreement prior to working on the AKSA.

The UK AKSA SharePoint is used to post and edit AKSA documents and share information. Access to AKSA documents is limited and monitored. Shareholder participants only have access to specific documents, and their access is limited to timeframes for collaborative work processes. UK AKSA program documents are stored online using Azure. Azure provides document security with a breadth of configurable security options and the ability to control them. UK can customize security to meet requirements of AKSA deployments. Microsoft Sentinel and Microsoft Defender for the cloud allow for identification, analysis, and reporting of security threats and suggest strategies for threat hunting and response through the Azure Advisor. The Application Performance Management (APM) system, Application Insights, monitors the ongoing use and performance of live web applications.

The AKSA is printed and distributed to students throughout the state of Kentucky. Documents that stress the importance of test security accompany each shipment and direct both District Assessment Coordinators and Building Assessment Coordinators in security procedures. Test Administrators are trained and instructed in security measures and must pass a qualification quiz prior to administration of the assessment. Student assessment scores are recorded on a score sheet and then transferred to the Student Registration Database, an online application that can only be accessed through username and password. The hard copy of the score sheet is stored in a secure student file.

Any documentation that is reviewed by the Kentucky Department of Education is accessed through File Transfer Protocol (ftp) sites. This is also the method used to transfer any student data and student scores in the final data export.

Monitoring of Test Administration

The KDE staff monitors the administration of both the KSA and the Alternate KSA by conducting site visits. The survey used in these visits can be found in **Appendix F**.

CHAPTER 7: SCORING

Recording Student Responses

During the administration of the items, the assessment administrator records the student responses on a paper score sheet provided in the assessment materials. The test administrator then enters student responses recorded on the score sheet into the Student Registration Database (SRD). The paper copy of the student responses is stored at the district level in a designated secure location.

Student Registration Database

The Student Registration Database is an automated system for collecting alternate assessment student data. Student responses for the Alternate KSA items in Reading, Writing, Mathematics, Science, and Social Studies are entered into the SRD and a raw score is derived. The SRD applies the answer key to the entered scores and applies the cut scores to determine the student's performance level. The cut scores are determined during the Standard Setting process (see **Chapter 6)**.

Response Key Development

There is a 10-step process for developing the response keys to ensure that the application is accurate and verified repeatedly in the transfer to the SRD administrator and to the KDE. The steps of this process are identified below:

1. During the development phase, stakeholder item writers provide the correct response and two incorrect responses.
2. During content and bias review, stakeholders verify that for each item a correct response is present and accurate.
3. The contractor develops a response key for each assessment based on stakeholder review outlined in the previous two steps.
4. Response keys are verified internally by the contractor.
5. Response keys are provided to the data system manager who maintains the Student Registration Database (SRD).
6. The response keys are entered into the automated system.
7. The response keys in the SRD are verified by contract staff.
8. Response keys are provided to the Office of Assessment and Accountability (OAA) at the Kentucky Department of Education (KDE).
9. One final check of the response key accuracy with the data and the application of performance level cut scores is conducted by the contractor.
10. The contractor exports a final data file to the KDE.

If at any point in the process, an error is discovered in the keys, the situation is reviewed, discussed, corrections applied, and resolved.

CHAPTER 8: TECHNICAL INFORMATION AND COMPARABILITY

Technical Information

Classical Test Theory (CTT) using raw scores is used for scaling and equating and reporting results. Operational scoring and reporting were completed following CTT using raw scores. Moving forward, Item Response Theory (IRT/Rausch mode) will be used to scale, equate, and report results.

Analyses completed for each of the 2024-25 tests in Reading and Mathematics in grades 3-8 and 11 and the appropriate grade levels 4/5 or 7/8 and 10 for Science, Social Studies and Writing included the following: Item statistics; Raw Score Frequencies, Distractor Analysis, Item Difficulty/Wright Map, Summary Fit Statistics, Reliability, Standard Error of Measurement, Differential Item Functioning, Classification Accuracy, and Decision Consistency.

The **Classical Test Theory Report** for the 2024-25 administration can be found in **Appendix G**.

CHAPTER 9: REPORTING

Multiple reports are used to document student performance on the Kentucky State Assessments and the Alternate KSA assessments. These reports present different levels of summary information about the KSA and target different audiences. This chapter discusses the various score reports used for Alternate KSA, including specific pieces of information as well as general cautions on using the reports. Sample reports are provided.

Appropriate Uses for Scores and Reports

The Alternate KSA covers a sample of curriculum content as specified through test blueprints; the tests do not assess all possible content in one test. Also, the content is assessed through a limited range of item types. Furthermore, the Alternate KSA is administered in two testing windows to address the characteristics of the learner and accommodate the individual administration required. Given these limitations of assessment, test scores should only be interpreted and used in the context from which they are obtained. In other words, Alternate KSA test scores should be used to describe student achievement on the content assessed (i.e., grade level) and not used to generalize achievement beyond the test. In addition, academic placement decisions and promotions should not be based on Alternate KSA test scores but should include other indicators of achievement.

Individual Student Report

The Individual Student Report (ISR) communicates an individual student's test scores and interpretations of achievement based on those scores. The types of score information presented on an ISR depend on the grade level of the student and will be discussed later in this chapter. The ISR provides the "snapshot" of achievement and explains the meaning of each piece of information provided, providing valuable information to students and parents. It is important that users of these reports do not extend the score information beyond the interpretations provided.

Kentucky Performance Report

Test scores are also summarized in reports at the school, district, and state levels, providing valuable achievement information to educators and administrators. These reports are useful for evaluating curriculum and instruction, delineating areas, at a group level, where progress in achievement may be necessary.

Student Performance Level

Student achievement on the Alternate KSA is defined by performance levels, within a classification system of achievement from low proficiency to high proficiency. In Kentucky, there are four levels of achievement—Novice, Apprentice, Proficient, and Distinguished. These labels are accompanied by Performance Level Descriptors (PLDs) that define the knowledge and skills typical in each category. Performance level summaries are included on the Alternate KSA score reports at all levels of reporting— student, school, district, and state. The Performance Level Descriptor, however, is only included on the student report (ISR) since it provides a description of individual student achievement. See the **Parent Guide to Assessment**.

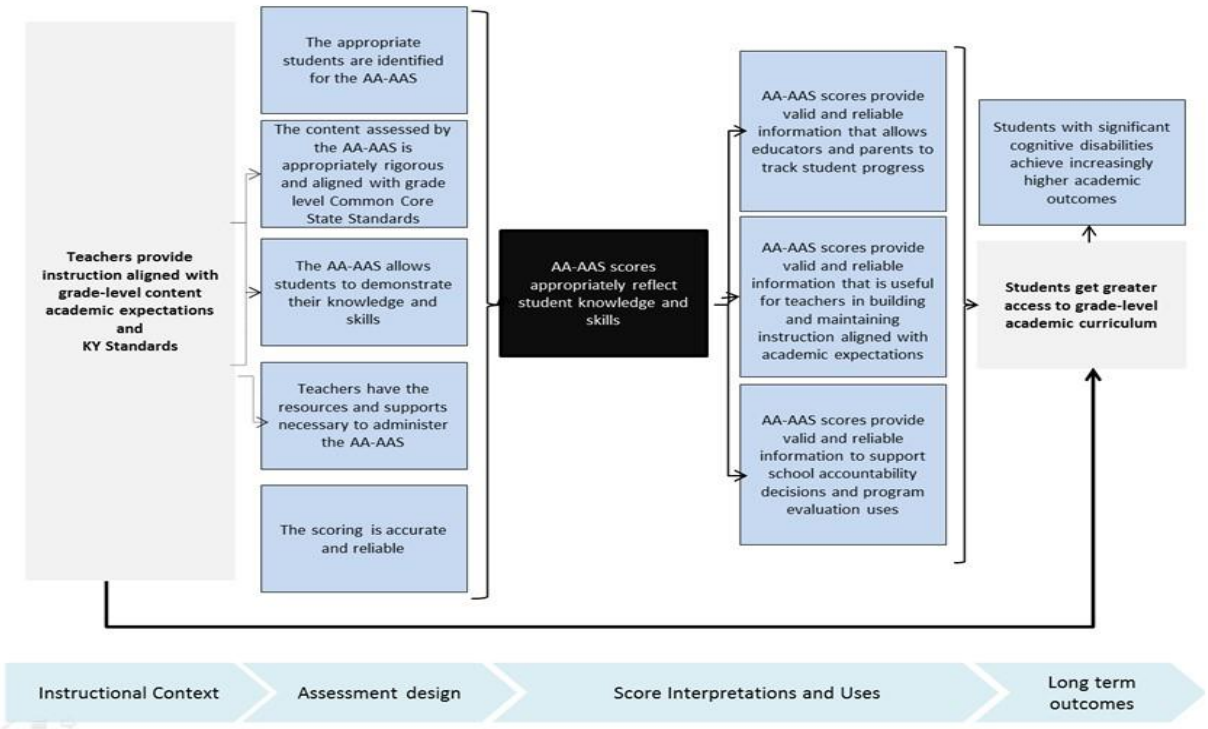
Chapter 10: VALIDITY FRAMEWORK

This chapter presents the intended interpretations and uses of the assessment scores derived from the Alternate KSA. Evidence supporting these assumptions and interpretations is provided by critical elements of the validity process. As outlined in the Theory of Action in Chapter 1, for the assessment to produce valid and useful results, the technical defensibility of content and construct validity must reflect student knowledge and skills.

It is important to note that the current Alternate KSA in Reading and Math was developed beginning in 2021 through 2022, immediately following the pandemic school interruptions. While schools in Kentucky had returned to in-person school, the effects of extended school closures present significant implications for the entire assessment system. The Alternate KSA assessments were administered as operational field tests, as school accountability was suspended during this time. New assessment items were integrated into existing forms of the assessment allowing for comparisons with previously used items. However, student performance among this population of students is likely significantly impacted.

Validity is defined as the degree to which the theory and evidence support the interpretations of the scores for the intended uses (*Standards for Educational and Psychological Testing*, 2014). Therefore, determining the extent to which the interpretations of the test scores that is subject to evaluation rather than the test itself. Propositions underlying a claim follow the intended outcome. As Alternate KSA scores appropriately reflect knowledge and skills, the assessment items appropriately capture the knowledge and skills, the items are designed to reflect the knowledge and skills and are administered correctly, the item writers are trained effectively which minimizes construct irrelevant variance.

Figure 2: Propositions Underlying a Validity Claim



As outlined in the Theory of Action in Chapter 1, for the assessment to produce valid and useful results, the technical defensibility of content and construct validity must reflect student knowledge and skills. Student scores should provide useful information for teachers to inform instruction and for parents to monitor progress. The Kentucky assessment system is anchored in the long-term goals that students with significant cognitive disabilities should achieve increasingly higher academic outcomes and post-secondary readiness.

The relationships among the score interpretations and uses, assumptions, and elements appear in Table 7. Each entry in the table is presented following the table, with descriptions and summaries of the supporting evidence.

Table 7: Primary Assumptions

Primary Assumptions
Intended Score Interpretation
The Alternate KSA scores provide valid and reliable information that is useful to teachers in building and maintaining instruction aligned with academic expectations.

1.0 The appropriate students are identified as participants in AKSA.

1.1 The content assessed by the Alternate KSA is appropriately rigorous and aligned with grade level state standards.

- 1.1.1 The AKSA items are aligned to the grade-level content standards.
- 1.1.2 The content standards are represented in the Performance Level Descriptors.

1.2 Alternate KSA test items are construct relevant. The elements corresponding to this assumption are concerned with the skills and cognitive processes required to understand and respond to an item and the extent to which they correspond to the skills and processes required in the PLDs.

- 1.2.1 Items require application of the KSAs of the targeted construct.
- 1.2.2 Items are accessible to all students.
- 1.2.3 Appropriate accommodation is provided to meet student needs.
- 1.2.4 Item administration does not interfere with student access to test content.
- 1.2.5 Items are free of bias and sensitive issues.

1.3 Test administrators followed prescribed, standardized procedural requirements.

- 1.3.1 Test Administrators and School and District Coordinators understood and performed their roles properly.
- 1.3.2 Test security concerns were limited.

1.4 Test scores on the Alternate KSA provide reliable information about student performance and accurate classifications into performance levels.

- 1.4.1 Alternate KSA scores and categorizations into performance levels are adequately reliable for their intended purpose.
- 1.4.2 Item characteristics support intended interpretations about all students who take the Alternate KSA.

1.5 Item and test scoring in 2021 were implemented accurately.

- 1.5.1 Items were scored accurately.
- 1.5.2 Scores were uploaded correctly.

1.6 Alternate KSA scores in reading and math correlate as expected with external indicators of student proficiency.

1.6.1 Alternate KSA scores correlate as expected with other measures of student proficiency.

Evidence to Support the Claim

The evidence presented in the technical manual substantiates the extent to which the Alternate KSA follows the seven primary assumptions related to the intended score interpretation required to meet this claim. It is important to note that the assessment is new and was field tested in 2021 following a year of school disruption due to the pandemic. External studies including the Equipercentile Linking and Alignment studies substantiate this claim even with recommended changes for future item development. The test design process has followed the protocol as required to meet this intended interpretation.

Intended Score Usage
The Alternate KSA scores provide valid and reliable information to support school accountability decisions and program evaluation uses.

2.0 Alternate KSA scores for groups of students are adequately reliable and valid to enable school, district, and state leaders to monitor changes in means, standard deviations, and proficiency level percentages for classroom, school, district, and state groups.

2.0.1 Alternate KSA scores for groups of students are adequately reliable and valid to enable school, district, and state leaders to monitor changes in means, standard deviations, and proficiency level percentages for classroom, school, district, and state groups.

2.0.2 Alternate KSA scores and proficiency level categorizations of groups of students are adequately reliable and valid to enable monitoring of grade-level performance.

2.0.3 The relationship between Alternate KSA scores and external measures of student achievement and growth is as expected, compared to grade-level assessments and other alternate assessments.

2.0.4 Alternate KSA results are used to design professional development for teachers.

Evidence to Support the Claim

The evidence presented in this document, including surveys, suggests that the reliability and validity of the scores are sufficient for program evaluation uses. This is a challenging assumption for this population as they experience disabilities that impact perceptions of their ability to learn even among trained professionals as well as the community at large. The external measures of student achievement for this population may be significantly different than the grade-level content standards. The KDE provides additional support for teacher training in the content standards and interpretation of student scores. Extensive stakeholder involvement also provides opportunities for educators to be involved in all parts of the assessment development process, increasing their knowledge and skills.

Intended Score Usage
The Alternate KSA scores provide valid and reliable information that is useful to teachers in building and maintaining instruction aligned with academic expectations.

3.0 Teachers use the Alternate KSA and its results to better integrate assessment with their instructional planning.

3.0.1 Teachers find the Performance Level Descriptors and their students' performance levels useful for planning instruction, especially students in performance levels 1 and 2.
3.0.2 Teachers find students' score information useful for planning instruction, especially students at levels novice and apprentice.
3.0.3 Teachers use Alternate KSA scores and other information for instructional planning.

Evidence to Support the Claim

Resources and training materials such as the PLDs, assessment targets, as well as training materials provided by the regional special education cooperatives to support instructional planning are provided. More evidence about teacher use of these materials would further support this claim.

Intended Score Usage
The Alternate KSA scores provide information that allows educators and parents to track student progress

4.0 Parents find Alternate KSA scores and other information useful for understanding what their child knows and can do.
4.0.1 Parents understand and interpret correctly Alternate KSA scores and other information to understand what their child knows and can do.
4.0.2 Parents use Alternate KSA scores and other information appropriately to understand what their child knows and can do and make decisions about their child's education and learning needs.
4.1 Parents find scores and other information useful for understanding their child's progress from year to year.
4.1.1 Parents understand and interpret correctly Alternate KSA scores and other information to understand their child's progress from year to year.
4.1.2 Parents use Alternate KSA scores and other information appropriately to understand their child's progress from year to year and make decisions about their child's education and learning needs.

Evidence to Support the Claim

Parents receive a report about the AKSA participation and scores. However, limited evidence is available to describe the extent to which parents understand and use the information in understanding progress and in making decisions about their child's education and learning needs.

Intended Score Usage
Students with significant cognitive disabilities achieve higher academic outcomes.

Evidence to Support the Claim

The relative performance distribution suggests that students with significant cognitive disabilities are achieving academic outcomes. However, external evidence is minimal to support this claim.

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APPENDICES

Appendix A: Learner Characteristics Inventory
Appendix B: Test Blueprints for Social Studies, Science, Writing
Appendix C: Item Writing Training
Appendix D: Content and Bias Review
Appendix E: Equipercentile Linking Report
Appendix F: KDE Survey for Administration Monitoring
Appendix G: Classical Test Theory Report

Appendix A: Learner Characteristics Inventory

Learner Characteristics Inventory for Alternate Assessments Based on Alternate Achievement Standards Version 3: 2016
Adapted by the KDE (Some Items may have been deleted from this version)

Citation: Kearns, J., Kleinert, H., Kleinert, J., & Towles-Reeves, E. (2006). *Learner characteristics inventory*. Lexington, KY: University of Kentucky, National Alternate Assessment Center.

Purpose: This inventory will be used to assist states in describing the population of students who take alternate assessments based on alternate achievement standards. These students represent less than 1% of the total student population and come from a variety of disability categories but represent students with the "most significant cognitive disabilities".

Student ID number: _____

Student's Grade-Level (choose one):
3rd
4th
5th
6th
7th
8th
9th
10th
11th
12th

Student's IDEA disability label (choose only the student's primary handicapping condition):
1 Intellectual Disability (includes Mild, Moderate, and Profound)
2 Multiple Disabilities
3 Autism
4 Speech/Language Impairment
5 Hearing Impairment
6 Visual Impairment
7 Traumatic Brain Injury
8 Emotional Disability
9 Deafblind
10 Other Health Impairment
11 Orthopedic
12 Other

Does the student's family primarily speak a language other than English (e.g., Spanish, French, Russian)?
1 Yes
0 No

Classroom Setting (check the best description)
1 Special school
2 Regular school, self-contained classroom for almost all activities
3 Regular school, self-contained classroom except for homeroom, lunch, and "specials"

4 Self-contained, children go to some general education academic classes but return to special education (61% or more of school day in special education classes)
5 Resource room, e.g. children come for services and then go back to their general education classroom (at least 40% of the school day in general education classes)
6 Inclusive/Collaborative – students based in general education classes, special education services delivered in the general education class (at least 80% of the school day in general education classes)

Augmentative Communication System (check the best description)
Does your student use augmentative communication systems (e.g., pictures, signs, electronic devices) in addition to or in place of oral speech?
1 Yes
0 No

Expressive Communication (check one answer that best describes your student)
1 Uses symbolic language to communicate: Student uses verbal or written words, signs, Braille, or language-based augmentative systems to request, initiate, and respond to questions, describe things or events, and express refusal.
2 Uses intentional communication, but not at a symbolic language level: Student uses understandable communication through such modes as gestures, pictures, objects/textures, points, etc., to clearly express a variety of intentions.
3 Student communicates primarily through cries, facial expressions, change in muscle tone, etc., but no clear use of objects/textures, regularized gestures, pictures, signs, etc., to communicate.

Receptive Language (check the best description)
1 Independently follows 1-2 step directions presented through words (e.g. words may be spoken, signed, printed, or any combination) and does NOT need additional cues.
2 Requires additional cues (e.g., gestures, pictures, objects, or demonstrations/models) to follow 1-2 step directions.
3 Alerts to sensory input from another person (auditory, visual, touch, movement) BUT requires actual physical assistance to follow simple directions.
4 Uncertain response to sensory stimuli (e.g., sound/voice; sight/gesture; touch; movement; smell).

Oral Speech to Communicate
1 Yes
0 No

Motor (check the best description)
1 No significant motor dysfunction that requires adaptations.
2 Requires adaptations to support motor functioning (e.g., walker, adapted utensils, and/or keyboard).
3 Uses wheelchair, positioning equipment, and/or assistive devices for most activities.
4 Needs personal assistance for most/all motor activities.

Engagement (check the best description)
1 Initiates and sustains social interactions.
2 Responds with social interaction but does not initiate or sustain social interactions.
3 Alerts to others.
4 Does not alert to others.

Health Issues/Attendance (check the best description)

1 Attends at least 90% of school days.
2 Attends approximately 75% of school days; absences primarily due to health issues.
3 Attends approximately 50% or less of school days; absences primarily due to health issues.
4 Receives Homebound Instruction due to health issues.
5 Highly irregular attendance or homebound instruction due to issues *other* than health.

Reading (check the best description)

1 Reads fluently with critical understanding in print or Braille (e.g., to differentiate fact/opinion, point of view, emotional response,). (OPTIONAL FOR STATES)
2 Reads fluently with basic (literal) understanding from paragraphs/short passages with narrative/informational texts in print or Braille.
3 Reads basic sight words, simple sentences, directions, bullets, and/or lists in print or Braille.
4 Aware of text/Braille, follows directionality, makes letter distinctions, or tells a story from the pictures that is not linked to the text.
5 No observable awareness of pictures, print or Braille.

Mathematics (check the best description)

1 Applies computational procedures to solve real-life or routine word problems from a variety of contexts.
2 Does computational procedures with or without a calculator.
3 Counts with 1:1 correspondence to at least 10, and/or makes numbered sets of items.
4 Counts by rote to 5.
5 No observable awareness or use of numbers.

Appendix B: Test Blueprints

Social Studies Alternate Assessment Blueprint Proposals

- Standards selected from Stakeholder prioritized standards.
- 10 standards across every grade.
- 30 items across two assessment windows.
- Each domain is represented 3 times across all grade spans (5, 8, & 12); each domain is consistently represented within 5% of general education blueprint range.

Grades 5, 8, and 12

	Grade 5	# Standards	Grade 8	# Standards	Grade 12	3 Standards
Civics	25-30%	3	25-30%	3	20-25%	2
Economics	20-25%	2	20-25%	2	25-30%	3
Geography	25-30%	3	20-25%	2	20-25%	2
History	20-25%	2	25-30%	3	25-30%	3

Writing

Writing is measured by a combination of the Editing and Mechanics and a brief On-Demand writing multiple choice test.

Editing and Mechanics Blueprint

Assessments are based on the Kentucky Academic Standards for Language. The editing and mechanics assessment will focus primarily on Conventions of Standard English (L.1 and L.2); however, some items will ask students to demonstrate knowledge of language and vocabulary use (L.3-L.5).

Table B2
Editing and Mechanics Blueprint

Grade	Prompt Mode	Percentage of Domain Coverage Target %
5	Conventions of Standard English	80
	Knowledge of Language & Vocabulary Acquisition and Use	20
8	Conventions of Standard English	80
	Knowledge of Language & Vocabulary Acquisition and Use	20
11	Conventions of Standard English	80
	Knowledge of Language & Vocabulary Acquisition and Use	20

Assessments are based on the Kentucky Academic Standards for Composition. The On-Demand Writing (ODW) blueprint focuses on C.1. Students will respond to one prompt, which is based on a set text.

Table B3
On-Demand Writing

Grade	Mode	Percentage of Domain Coverage Target %
5	Opinion	100

8	Argumentative	100
11	Argumentative	100

Appendix C: Item Writing Training Narrative

Alternate Assessment students make up about 1% of the student population. This will be the first draft of these Attainment Tasks. After your initial development, you will review comments and/or provide suggested feedback in track changes. After our debrief meeting, illustrators will work on completing your vision and finally all items will go to another content review, to a bias review committee, field testing, and review by KDE assessment and exceptional children's department so there may be some changes. We are writing items for all content areas except science, because science has a full test bank and the standards are currently under review.

- Students must meet the 14 required participation guidelines set forth by the Kentucky Department of Education.

- The student population taking the alternate assessment represents approximately 1% of the total student population and the learners are more diverse in terms of increased needs for accommodation and supports than the remaining 99% of the student population

It is important to keep the items connected with the context that is taught in the general education classrooms. In addition to the requirement of IDEA that students have access to and show progress in the general curriculum, it is important to encourage inclusion into general education classrooms. The difference between this assessment and what is asked of the general assessment will be at the difficulty level, fewer standards assessed, and the cut scores. We have been seeing an increase in what students can show us they are capable of learning, and we need to continue to challenge this population.

Some tasks may have only one standard, whereas other tasks may have as many as four standards. EACH item should relate to one standard. **You will be assigned 3 tasks in which to write the 5 items** – the items must match the standards for that task and the number of items per standard.

The design of the Attainment Tasks is intended to be based on an authentic activity or original passage (or one that has been adapted from something in public domain). The scenarios should be either something that the student could currently experience (e.g., making a poster for a poster contest) or one that could happen as an adult (e.g., as an employer you want to give your employer's safety rules). The items will be developed in groups of 5 items and each group should center around one scenario or passage. The response is multiple choice and will have picture response options. Some additional materials may need to be developed – like animations in reading or maps in social studies. These must be described in the area listed as "Supplemental Materials."

You will each be writing 15 items (or 3 tasks) per content/grade. So in Social Studies you are writing 15 items regardless of your grade level, because social studies is tested at only one grade per grade band. However, if you are writing for ELA, that includes both reading and writing – so at elementary school for instance, you will be writing 15 items for grade 3, 15 items for grade 4, 15 items for grade 5 and 15 items for grade 5 writing – for a total of 60 items – or 12 tasks. Describe in detail any supplemental material needed – if you have specific images/maps/etc… provide a URL for the illustrators.

Understanding Design by Wiggins and McTighe has been used to assist in the development process. Big Ideas and enduring understanding are two things that the book speaks to and that KDE has incorporated in unpacking the standards. This is very important to think about when working with students with significant

disabilities. Rather than automatically moving to a lower-level skill, or what is considered an “out of level” test, it is more helpful to think in terms of enduring understanding which increases the meaningfulness.

This information is from the Understanding by Design Workbook and is to give you an idea of some scenarios. In stage 1 you look at what you want to see if your student knows/understands. Then in stage 2 you determine how the student can demonstrate the knowledge/understanding.

The Standard Documents with the alternate assessment target documents are provided in your folders online.

This is the process that you will use to develop the items. Look at the content area template that you have. The first thing you will do is to review your standards. Then you will develop a scenario or write an original passage (or adapt one from public domain).

Ensure you are measuring what you think you are measuring and that you have not gone beyond the assessment target if one is present.

Describe or provide links to any accompanying materials you would like incorporated into the task. If you need a specific graph or map that is already published – please provide the URL along with the description. Indicate if the supplemental material needs to be in color or if B/W will suffice. If you are requesting an animation, be specific about what you want. If it is for reading – the animation likely must be DIFFERENT than the passage – be sure to include those differences.

Make sure there is a variety of DOK levels in the task – recall are often the most difficult for this student population – so ensure they have questions that allow them to apply the skills and knowledge that they have.

Finally, please take the time to vary the placement of the correct answer within your five items and always mark the correct answer.

In Social Studies – all standards are linked to a theme in grades K – 8. Those MUST be incorporated with your item development. For Grade 5 the theme is Colonization to Constitution and all items MUST be in relation to this period in the US whereas the theme at grade 8 is The United States: 1600-1877 and all questions must relate to this theme.

In Math, mathematical practices must be embedded into the items. The practices can be found at the beginning of each grade standard and assessment target document.

In Writing – the first 3 tasks are all about editing and mechanics – see the standard grouping form to see the breakdown. Tasks D – F are using multiple choice questions to develop a written piece aligned to the standard (persuasive/argumentative). Task D must develop the introductory paragraph, task E the body paragraph, and Task F the concluding paragraph.

It is important to avoid definitions and the need to learn discrete definitions, terminology, dates, names, etc. Instead concentrate on the concepts and understandings. As mentioned in the previous slide it is important to keep connected to the general education curriculum (same grade level). While not all students are included in general education class, many are and the intent of the Least Restrictive Environment in IDEA is that most students would be included in general education classrooms. Additionally, these are the classes that are often selected for inclusion. Avoid looking at what is viewed as "what these students need."

The curriculum is designed for all students. Not everything is "functional" for all students. For example, a bus route map would not be functional for most students in Kentucky who live in rural areas. Shopping is not the most functional skill for students who are dependent upon others to provide mobility. Lastly, keep passages short to reduce memory load. Split information into separate pieces if a lot of information is needed. Keep the vocabulary simple and familiar to most teachers in Kentucky.

The tasks will go before a bias review committee, but the more we can avoid bias at this time, the less changes that may be needed later. While considering biases, do not exclude any standards. For instance, rather than completely avoiding visual arts for a blind student, write the item(s) so that access can be provided.

Guidelines to follow as you develop items. Remember that sometimes our students can demonstrate complexity at Depth of Knowledge (DOK) 2 or 3 just by reducing the difficulty level or providing the correct prompts. Be sure not to dwell on recall, which is not a strength of this population. Provide as much description as possible for any accompanying material that will need to be developed. For instance, a map of the US that shows natural resources including corn, cattle, energy, etc.

Appendix D: **Content and Bias Review Stakeholder Feedback**

For every item, there are three response options, and a picture response option is provided to support students. Additionally, there may be additional materials, identified as Required Assessment Materials (RAM), that may be necessary to answer items. Examples of RAM include maps, graphs, tables, coordinate planes, reading texts, and accompanying picture boards, animation, and/or audio files. All these materials are reviewed for content and bias considerations.

In mathematics, there were 10 new items per grade (3, 4, 5, 6, 7, 8, and 10) for a total of 70 items across all grades that were reviewed. In elementary, there were two requested edits in grade four. One response was edited, which then required a new picture response option. There were no requested edits at grade three or five. In middle school, there were two changes to the wording of two separate grade six items, two changes to the wording of two separate grade seven items, and one change to the wording of a grade eight item. There were no changes required in high school mathematics.

Mathematics **Grade**	**Item Edits**	**Response Edits**	**Response Image Edits**	**RAM Edits**
3	**0**	**0**	**0**	**0**
4	**0**	**1**	**1**	**0**
5	**0**	**0**	**0**	**0**
6	**2**	**0**	**0**	**0**
7	**2**	**0**	**0**	**0**
8	**1**	**0**	**0**	**0**
10	**0**	**0**	**0**	**0**

In reading, there were 10 new items per grade (3, 4, 5, 6, 7, 8, and 10) for a total of 70 items across all grades that were reviewed. In elementary school, there were four requested edits to grade three items and seven requested edits to grade four items. There were no requested edits to grade five items. In middle school, there were three requested edits to grade six items, six requested edits to grade seven items, and five requested edits to grade eight items. At high school there were 11 requested edits to grade 10 items.

Reading Grade	Item Edits	Response Edits	Response Image Edits	RAM Edits	Text Edits
3	0	1	1	1	1
4	0	1	2	1	1
5	0	0	0	0	0
6	2	0	0	1	0
7	2	3	1	0	0
8	0	1	4	0	0
10	3	5	0	1	2

In science, there were 30 new items per grade (4,7, and 11) for a total of 90 items across all grades that were reviewed. In elementary school, there were three requested edits to grade four items. In middle school, there were eight requested edits to grade seven items. At high school, there were 11 requested edits to grade 11 items.

Science Grade	Item Edits	Response Edits	Response Image Edits	RAM Edits
4	0	0	2	1
7	0	1	6	1
11	2	3	3	3

In social studies, there were 10 new items per grade (5,8, and 11) for a total of 30 items across all grades that were reviewed. In elementary school, there were 10 requested edits to grade five items. In middle school, there were seven requested edits to grade seven items. At high school, there were seven requested edits to grade 11 items. Most of the edits to items and response options were verbiage where a single word or group of words were edited to a preferred word or group of words.

Social Studies Grade	Item Edits	Response Edits	Response Image Edits	RAM Edits
5	0	4	6	0
8	2	4	1	0
11	2	1	4	0

In writing, there were 20 new items per grade (5,8, and 11) for a total of 60 items across all grades that were reviewed. In elementary school, there were two requested edits to grade five items. In middle school, there were seven requested edits to grade seven items. At high school, there were five requested edits to grade 11 items. Most of the edits to items and response options were verbiage where a single word or group of words were edited to a preferred word or group of words.

Writing Grade	Item Edits	Response Edits	Response Image Edits	RAM Edits	Text Edits (Window 2)
5	0	2	0	0	0
8	0	4	3	0	0
11	0	4	1	0	0

Appendix E: Equipercentile Report Review – HumRRO, 2024

Appendix F: LINK KDE Survey for Test Administration Monitoring

Appendix G: Classical Test Theory Report