

# Discovery Education, Inc.

## Supplemental English Mathematics, K

### DreamBox Math for Texas–Grade K

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
<b>Supplemental</b>	<b>9781607117582000</b>	<b>Digital</b>	<b>Adaptive</b>

#### Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	36	5	Flags Not in Report	Not Applicable	0

#### Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. <a href="#">Intentional Instructional Design</a>	20 out of 21	95%
2. <a href="#">Progress Monitoring</a>	18 out of 23	78%
3. <a href="#">Supports for All Learners</a>	32 out of 37	86%
4. <a href="#">Depth and Coherence of Key Concepts</a>	16 out of 16	100%
5. <a href="#">Balance of Conceptual and Procedural Understanding</a>	36 out of 38	95%
6. <a href="#">Productive Struggle</a>	19 out of 19	100%

#### Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	0	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	0	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	0
Category 6: Promoting Sexual Risk Avoidance	0

# IMRA Quality Report

## 1. Intentional Instructional Design

Materials support educators in effective implementation through intentional course and lesson-level design.

### 1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	5/5
1.1b	All criteria for guidance met.	3/3
1.1c	All criteria for guidance met.	2/2
1.1d	The materials do not contain guidance for unit internalization.	1/2
1.1e	All criteria for guidance met.	2/2
—	TOTAL	13/14

**1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.**

The grade K *DreamBox Math* Supplemental Curriculum Materials include an alignment guide that clearly outlines the Texas Essential Knowledge and Skills (TEKS), and the corresponding mathematical concepts addressed at the grade K level.

The guide provides a rationale for learning paths within the same grade level, illustrating how instructional content is sequenced to support coherent and scaffolded learning experiences across units. This horizontal alignment is evident in the structure of the materials and demonstrates intentionality in connecting related concepts within the grade K curriculum.

There is evidence of vertical alignment across grade levels, such as connections to prior or future grade-level TEKS, progressions of skill development, or learning pathways built across the K–2 curriculum. This can be found in the *DreamBox* interface on the Professional Development Platform in a document titled "*DreamBox* Learning Units by Domain Category."

The *Teacher Guide* references the English Language Proficiency Standards (ELPS) and provides embedded support and guidance to address the language development needs of English learners aligned to each lesson objective.

**1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use in various contexts, such as just-in-time supports, advanced learning, or as a course.**

*DreamBox Math* grade K instructional materials include a section on their website called PD. Within this section is a portion of the materials called "*DreamBox University*." In this section of the grade K *DreamBox Math* materials is the *30–60–90 Implementation Guide*, which outlines a checklist for tracking the curriculum rollout within a classroom.

Within the "*DreamBox University*" section of the grade K *DreamBox Math* instructional materials is a self-paced course titled "Implementing *DreamBox Math* in Your Classroom." This course has sections clearly labeled that provide explicit guidelines for how many lessons students should engage in each week, suggestions for classroom implementation structures, classroom expectation suggestions for varying grades and learning abilities, and implementation planning worksheets.

The *DreamBox Math* instructional materials provide a reviewer guide that provides extensive information on how it complements *Bluebonnet Math* curriculums. It includes sample TEKS-aligned lessons, simple overviews, instructions on how to get started, and sample login information to view *DreamBox Math* as a user and experience everything it has to offer the classroom facilitator or administrator.

**1.1c – Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.**

The *DreamBox Math* instructional materials include a system called the Launchpad. This portion of the instructional materials has an interface that allows instructional facilitators to give on-demand diagnostic assessments.

Diagnostic assessment results and recommended skill entry points are outlined through the Launchpad diagnostic tool.

Launchpad generates an individualized learning pathway based on each student's results. These pathways are aligned with the TEKS and vary in complexity to meet individual learning needs.

Within the *DreamBox Math* Launchpad, facilitators can assign additional instructional formative assessments that meet the TEKS for the student's grade level.

**1.1d – Materials include protocols with corresponding guidance for unit and lesson internalization.**

To support adequate lesson preparation, the *DreamBox Math* instructional materials include various lesson internalization resources available to teachers. These materials are designed to assist in

thoroughly previewing each lesson, reviewing essential academic vocabulary, and preparing for critical components, such as whole-group discussions and formative or summative assessments.

Each lesson is accompanied by a detailed, scripted sample lesson flow that clearly outlines the expected teacher and student actions throughout the instructional sequence. In addition, targeted strategies are included to help educators meet the needs of bilingual students, ensuring more equitable and accessible instruction for all learners.

Teachers will also find supplementary instructional resources to enhance their readiness and confidence in delivering the lesson.

While teachers have access to multiple supports at the lesson level to aid in internalization, it is essential to note that resources specific to unit-level internalization are not currently available.

### **1.1e – Materials include resources and guidance for instructional leaders to support educators with implementing the materials as designed.**

Instructional leaders have a *DreamBox Math* Micro-Training resource within the *DreamBox Math* Toolkit. This tool is designed to help instructional leaders introduce *DreamBox Math* to their instructional staff in just 15 minutes.

The Micro-Training package includes a ready-to-use slideshow presentation, a detailed presenter script to guide delivery, and a practical *30–60–90 day Implementation Guide* tailored for instructional or district leaders overseeing the rollout. These materials streamline the onboarding process, ensuring teachers understand the platform's purpose, features, and instructional impact quickly.

The toolkit includes resources that enable administrators to lead teacher professional development sessions, including training specifically focused on using the platform's embedded assessment tools.

The toolkit features an easy-to-follow implementation checklist to help leaders monitor progress and ensure fidelity of use across classrooms.

## 1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	This guidance is not applicable to the program.	N/A
1.2b	All criteria for guidance met.	5/5
1.2c	All criteria for guidance met.	2/2
—	TOTAL	7/7

**1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.**

This guidance is not applicable because the program is not designed to be static.

**1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.**

Lesson plans are available online through the *DreamBox Math* instructional materials under the Curriculum tab. Plans support instructional planning and delivery with clearly defined learning objectives, aligned instructional components, and teacher- and student-facing materials.

Each lesson includes a detailed breakdown of instructional components and suggested time frames to support pacing and time management.

Lessons are aligned with the Texas Essential Knowledge and Skills (TEKS). A sample lesson flow is provided in each lesson, outlining teacher and student actions and instructional sequencing to support lesson preparation and delivery.

Teacher Narratives provide detailed overviews. These overviews include "Learning Objectives" and "Assessments" aligned to both the TEKS and English Language Proficiency Standards (ELPS).

**1.2c – Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).**

The *DreamBox Math* curriculum includes family support materials for each unit, available in English and Spanish. These resources are designed to help families monitor and support student progress. Each unit contains a guardian letter and suggestions for reinforcing student learning at home.

Instructional materials are accessible to educators through the Parent Portal in the "Home Access" section. The Family Insights Dashboard allows families to view a summary of their student's progress. The

dashboard includes indicators of concept mastery and overall usage trends. These tools provide families with visibility into student engagement and growth in *DreamBox Math*.

## 2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

### 2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	The materials do not contain a printable version of digital assessments, content and language supports, and a calculator that can be enabled and disabled.	1/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	13/16

#### 2.1a – Materials include the definition and intended purpose for the types of instructional assessments.

The *DreamBox Math* grade K curriculum demonstrates consistent and accurate administration of instructional assessments. Definitions and explanations of the intended purposes of these assessments are provided within the Educator Dashboard. A supporting course, "Understanding *DreamBox* Adaptivity and Assessment," offers a thorough explanation of the program's adaptive design and assessment approach.

The *DreamBox* Educator and Administrator Demo Experience K–2/Supplemental K–2 Math includes definitions for the types of instructional assessments available to educators. The platform outlines the intended purposes for each assessment type. For example, the "Growth Report" provides insight into student progress and is updated nightly to ensure current data. The "Standards Report" presents student proficiency data disaggregated by standard, offering a detailed view of individual skill development within *DreamBox Math*.

*DreamBox Math* grade K integrates both diagnostic and formative assessments that are fully aligned with the Texas Essential Knowledge and Skills (TEKS). These assessments are designed to evaluate student understanding and progress through a range of question types and varying levels of complexity. The adaptive nature of the program ensures that assessments respond to each student's performance in real time, providing data that informs individualized learning paths. Additionally, the Instructional Assessments tab on the Reviewer Site includes a "Demonstrated Understanding" section, which guides educators in interpreting assessment results and determining when targeted progress monitoring is necessary.

## **2.1b – Materials include guidance to ensure consistent and accurate administration of instructional assessments.**

*DreamBox Math* grade K instructional materials include clear guidance to ensure the accurate administration of instructional assessments. Within the Educator Dashboard under the Implementation Toolkit, teachers are provided with a list of prompts and suggested questions designed to support students without providing answers, thereby maintaining the integrity of the assessment process within the lessons.

*DreamBox Math* grade K *Implementation Guide* also provides a printable checklist called "Thinking Independently," which helps teachers offer appropriate support without influencing assessment outcomes.

Materials include an *Implementation Guide* and video resources to support educators in administering assessments within *DreamBox Math*. This guidance includes information on how to give an assessment and the steps educators need to follow, ensuring consistent and accurate administration.

## **2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.**

The online practice component supports diverse learner needs through the inclusion of a text-to-speech feature, which can be enabled or disabled to accommodate individual student preferences and accessibility requirements.

*DreamBox Math* grade K instructional materials do not offer printable materials or assessments specifically tailored to digital components, and content and language support that can be selectively enabled or disabled are omitted, which may limit the program's ability to differentiate instruction for English learners or students requiring additional scaffolding. While a calculator is available within the online practice environment, this feature cannot be disabled, which may affect instructional decisions regarding tool use in early mathematics instruction.

## **2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.**

*DreamBox Math* grade K instructional materials include diagnostic assessments featuring TEKS-aligned tasks and questions that span more than two levels of complexity. This structure is documented on the Reviewers Site under the Instructional Assessments tab.

*DreamBox Math* grade K instructional materials offer a placement test for each student. The Initial Placement tab explains that the program's diagnostic tool, Launchpad, determines each student's appropriate starting level of complexity.



*DreamBox Math* grade K diagnostic assessments incorporate more than two distinct interactive item types, including drag-and-drop tasks, graphing, and equation editors. This is outlined on the Reviewers Site under "Instructional Assessments." The Initial Placement tab explains that Launchpad's diagnostic assessment "uses the same ... engaging experience as the rest of *DreamBox*," presenting questions that are "aligned with the TEKS and include interactive item types of varying complexity levels." Additional examples of these interactive item types are provided under the STAAR-Aligned Supports tab, with corresponding activities accessible through the Curriculum tab in the Educator Dashboard.

Diagnostic assessments in Launchpad include TEKS-aligned tasks with varying complexity levels and multiple interactive item types, such as multiple choice, drag-and-drop, constructing shapes, and identifying/labeling.

### **2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.**

With *DreamBox Math* grade K, students complete formative assessments with TEKS-aligned tasks and questions that include more than two levels of complexity. Each *DreamBox Math* lesson is categorized as "Exploring and Sense Making," "Looking for Structure and Relationships," or "Fluency, Application and Procedural Skills." *DreamBox Math* states, "Through interactive item types of varying complexity levels, *DreamBox* collects data points from each student's interactions to evaluate the strategies used to solve problems."

*Grade K DreamBox Teacher Guide* and *Implementation Guide*, both located under the Resources tab of the Educator Dashboard, provide further clarification that students continue to engage with tasks at varying levels of complexity. According to these guides, students are expected to achieve a progression equivalent to one and a half academic years if they complete an average of five lessons per week.

Within the STAAR-Aligned Supports tab, the *STAAR Alignment Guide* assists educators in preparing students for proficiency as measured by State of Texas Assessments of Academic Readiness (STAAR) assessments. The guide states that interactive response features and task item types are embedded throughout each student's personalized learning pathway to support active learning and independent critical thinking. The document provides visual examples of the item types used in *DreamBox Math*, including drag and drop, equation editor, graphing, hot spot, text entry, number line, and fraction model.

## 2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	The materials do not contain a rationale for every correct and incorrect response provided.	1/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	This guidance is not applicable to the program.	N/A
2.2e	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	<b>5/7</b>

### 2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.

The article "Understanding Math Dashboard Reports" within the Educator Dashboard provides detailed guidance on how educators can interpret student performance data from both initial assessments and those administered throughout the learning experience. The resource outlines how teachers can monitor individual student performance on specific standards and determine whether students are performing below, at, or above grade level. The "Standards Report" available on the *DreamBox* demo site illustrates how students are performing on individual standards across grade levels. It indicates whether students are demonstrating progress, have reached proficiency, or have not yet begun working on a given standard grade level.

*DreamBox Math* provides educators with scoring data and guidance for interpreting student performance. The adaptive materials include digital quizzes that deliver immediate scoring and personalized feedback. The Teacher Dashboard offers a comprehensive overview of student progress, identifies students who may require intervention, suggests individualized lessons, and displays both current and completed lessons for each student. Rationales for correct and incorrect responses are not provided.

### 2.2b – Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.

Based on student performance on assessments, the adaptive materials generate a recommended sequence of tasks or activities for the student to complete. The Home page and accompanying reports identify specific skills that require additional practice. Educators can supplement the recommended pathway by assigning targeted activities that address individual areas of need.

*DreamBox Math* provides instructional materials that guide educators in using embedded tasks and activities to respond to trends in student performance on assessments. According to *DreamBox*, "For example, if three different students are working on a particular lesson, they will each be offered different

follow-up lessons based on how they responded to questions throughout the lesson. The *DreamBox* adaptive engine selects the next set of recommended lessons based on each student's demonstrated strengths and struggles."

## **2.2c – Materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth.**

*DreamBox Math* grade 2 materials include intervention lessons designed to address student performance trends identified through assessment data. Based on assessment results, the adaptive materials generate a recommended sequence of tasks or activities for students to complete. The Home page and associated reports identify specific skills in which additional practice is needed. Teachers can further customize instruction by adding assignments to a student's recommended pathway, thereby directing them to activities that target particular areas of need.

The *DreamBox Math* grade 2 instructional materials include tools that enable educators to monitor student progress and growth. The "Student Overview" for each displays the total number of required standards for the grade level and indicates whether a student has mastered a standard through diagnostic assessment, demonstrated proficiency through a lesson, or is currently engaged with it. Additional details can be accessed by selecting the highlighted sections within the overview.

Within the *DreamBox Math* grade 2 instructional materials, teachers can utilize reports, such as the *DreamBox* "Growth Report," to monitor student progress and growth. Within the demo site's student experience, progress is disaggregated by standard, allowing for detailed analysis of individual student performance.

## **2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.**

This guidance is not applicable because the program is not designed to be static.

## **2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.**

*DreamBox Math* grade 2 instructional materials incorporate frequent checks for understanding at critical points within each lesson or activity. These formative assessments offer educators real-time insights into individual student progress and help identify those who may require additional support or intervention. The Educator Dashboard presents detailed student information through the "Alerts" and "Achievements" sections, which highlight students needing teacher attention to master specific skills.

*DreamBox Math* grade 2 instructional materials include the *DreamBox* Play website, which includes lesson plans that enable teachers to check for understanding throughout the narrative-based instructional sequence.

According to the *DreamBox* Reviewer Site, under the tab titled The *DreamBox* Difference, "Continuous formative assessment powers the adaptive engine to tailor the learning pathway, the individualized lessons, and provides immediate insights into student thinking around key mathematical concepts, empowering educators with the data they need to monitor progress and deliver targeted instruction."

*DreamBox Math* grade 2 instructional materials describe its adaptive response to frequent checks for understanding in the section titled "How *DreamBox Math* Recommends Lessons." The platform offers over 2,300 lessons and supports millions of individualized learning paths. It adjusts in real-time by adapting hints, difficulty level, pacing, and lesson sequence to engage students within their optimal learning zone. *DreamBox Math* lessons are not designed to follow a linear progression. For example, if three students are engaged in the same lesson, each will receive different follow-up lessons based on their responses to the embedded questions. The *DreamBox* adaptive engine recommends subsequent lessons based on each student's demonstrated strengths and areas of struggle.

### 3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

#### 3.1 Differentiation and Scaffolds

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	All criteria for guidance met.	2/2
3.1d	The materials do not contain accommodations, such as content and language supports, and calculators that can be enabled and disabled.	1/3
3.1e	All criteria for guidance met.	2/2
—	TOTAL	10/12

##### **3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.**

*DreamBox Math* grade K instructional materials provide explicit teacher guidance for supporting students who have not yet achieved proficiency, as indicated on the *Targeted Assignment Planning Worksheet*. This planning tool directs educators to identify specific areas of need using the "Standards Report," deliver guided instruction through a preview lesson, assign targeted activities, and monitor and document student progress throughout the lesson sequence.

Lesson recommendations for individual students identify specific skill deficits and provide suggested practice lessons tailored to address those gaps. Both students and teachers can access these recommendations through the "Lesson Highlights" section, which supports instructional decision-making and targeted skill development.

##### **3.1b – Materials include explicit educator guidance for language supports, including pre-teaching and embedded supports for developing academic vocabulary and unfamiliar references in text.**

Instructional materials include explicit educator guidance for language supports, including both pre-teaching and embedded supports for developing academic vocabulary and addressing unfamiliar references in text. For example, in a grade K lesson on finding sums to 10, teachers are directed to introduce the academic term "sum" by stating, "Explain to students that today they will be solving word problems using objects. Introduce the concept of a 'sum' as the total amount when we add things together." This pre-teaching strategy provides students with foundational vocabulary needed to access

the mathematical content. Additionally, the lesson integrates language supports throughout instruction to reinforce comprehension and facilitate ongoing vocabulary development.

Instructional materials include explicit educator guidance for language supports, including both pre-teaching and embedded supports for developing academic vocabulary and addressing unfamiliar references in text. According to the Instructional Design tab of the *DreamBox* Reviewer Site, "*DreamBox* integrates academic vocabulary throughout its lessons. Visuals, audio supports, and guided prompts encourage students to express reasoning and engage in mathematical discourse. Educator tools such as printable glossaries and 'Lesson Highlights' help scaffold and extend language development in both English and Spanish." These tools and strategies provide structured support for vocabulary acquisition before and during instruction.

The *Curriculum Guide* section labeled "Common Misconceptions" provides teachers with support when vocabulary or references are unclear. For instance, students may believe the unknown in  $2 + \square = 5$  represents the total or the larger number. Such misconceptions can cause errors in recognizing the unknown as "the missing part that makes the equation true." This section also enables teachers to anticipate and clarify unfamiliar references in the text. By outlining potential challenges, it allows teachers to deliver precise explanations and targeted instruction.

### **3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.**

Instructional materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills. *DreamBox Math* grade K materials provide individual student reports that identify students who have mastered current grade-level standards and have begun working on more advanced skills. For example, Savannah I., a student in the K–2 range, has demonstrated mastery of all of the K–2 Texas Essential Knowledge and Skills (TEKS) and is currently working on the grade 3 and grade 4 TEKS that have not yet been mastered. The system adjusts the learning pathway to include higher-level standards based on individual performance data.

*DreamBox* provides extension activities aligned to student proficiency. Individual reports allow educators to determine which students are being introduced to content from the next grade level. Savannah I. is proficient in select grade 3 and grade 4 skills and is continuing work on the additional TEKS in those grades. Instructional pathways reflect demonstrated readiness and support continued academic growth through targeted enrichment.

### **3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.**

*DreamBox Math* grade K curriculum digital materials provide accommodations that educators can manage through the Educator Dashboard under Settings > Roster. This feature supports students with reading challenges or visual impairments, though it is only available for students using a third-party screen reader.

The instructional materials do not provide content and language supports that can be enabled or disabled for individual students. While educators can change the interface language between English and Spanish, this setting does not function as a content or language accommodation within the assessments.

While calculators are included within the *DreamBox Math* curriculum as part of the digital assessments, educators cannot enable or disable them. Their availability is fixed and determined by the assessment design, which limits the flexibility to adjust this tool based on individual student needs or testing accommodations.

### **3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.**

Instructional materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as performing, expressing, and representing. For example, in the grade K lesson "Solving Word Problems with Sums to 10," students are encouraged to solve problems independently, represent their answers using various methods, and engage in mathematical discourse with peers. The lesson plan states, "For the final problem, present: 'You have 5 balloons, and you lose 2. How many balloons do you have left?' Students solve this independently and then share their strategies with a partner. Finally, ask selected students to share their reflections on the strategies they used and any patterns they noticed in the problems." This approach allows students to demonstrate their understanding through multiple modalities and provides embedded opportunities for expression and reasoning.

Instructional materials include educator guidance on providing supports for students to demonstrate understanding of mathematical concepts in various ways, such as performing, expressing, and representing. For example, to address standard K.2.A, students engage in a "Just Started" lesson that requires them to count forward and backward to 20 using bead models. In the corresponding "In Progress" lesson, students manipulate tiles on a digital number line to sequence numbers in order. Throughout both lessons, embedded hints are available to support students as needed, enabling multiple modes of representation and reinforcing conceptual understanding.

## 3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	This guidance is not applicable to the program.	N/A
3.2c	All criteria for guidance met.	3/3
3.2d	All criteria for guidance met.	2/2
3.2e	All criteria for guidance met.	2/2
—	TOTAL	12/12

### **3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.**

The *DreamBox Math* curriculum includes multiple means of representation, such as visual manipulatives, number lines, and area models, to support concept visualization and highlight mathematical patterns and relationships. Instructional materials provide direct prompts and guidance for educators to connect prior knowledge and anchor big ideas. For example, math racks and dominoes appear in standard K.2.G, 10 frames and number lines in 1.3.A, and packing boxes with place value charts in 2.2.A.

The *DreamBox Math* grade K instructional materials provide teacher narratives with explicit prompts that activate prior knowledge and emphasize big mathematical ideas. In the lesson "Solving Multi-Step Subtraction Word Problems," the teacher warm-up directs educators to review subtraction strategies and ask students to share their methods. The introduction anchors big ideas by guiding educators to define subtraction-related terms, model problem-solving strategies, and highlight how organizing known information supports understanding.

The *DreamBox Math* grade K lesson in K.2.C includes blended digital lessons and educator-facing materials with explicit prompts and embedded supports that activate prior knowledge and anchor big mathematical ideas. Teacher narratives pair with adaptive activities and include scripted prompts such as, "Can you show me the number ten with your objects? Give me a thumbs up when you are ready." These prompts guide students in representing numbers using objects, pictures, and standard form, highlighting key patterns, features, and relationships through multiple means of representation.

### **3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.**

This guidance is not applicable because the program is not designed to be static.



### **3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.**

The *DreamBox Math* grade K lesson "Representing Numbers with Objects" includes multi-tiered intervention methods for guided, independent, and collaborative practice. Instructional materials support various instructional structures, including whole-group, small-group, and individual settings. Educator guidance is provided to support the effective implementation of these intervention methods.

The *DreamBox* Reviewer Site under "Supports for All Learners" states that the program integrates intervention, enrichment, and extension methods aligned with Multi-Tiered System of Supports (MTSS) and Response to Intervention (RTI) frameworks. The online program uses adaptive technology to deliver personalized learning pathways and differentiated lessons based on individual student needs. Teachers also receive guidance and flexible controls to assign lessons that support a range of learners and instructional goals.

The *DreamBox Math* instructional materials include multi-tiered intervention methods for small-group and individual instruction. Adaptive tools, found in the Lesson Recommendations and Insight Dashboard, provide real-time reports on student progress and identify learning gaps. These tools suggest strategic small groupings based on students working on similar lessons and the Texas Essential Knowledge and Skills (TEKS). Teachers can also select individual students to access detailed insights on current understanding and readiness for upcoming concepts. This guidance supports targeted intervention and flexible instructional planning.

### **3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.**

The *DreamBox Math* instructional materials include enrichment and extension methods that support various forms of student engagement. Materials offer differentiated options, such as challenges for advanced learners and scaffolds for those needing additional support. Adaptive technology creates personalized learning pathways, while teacher-assigned lessons provide flexibility to align instruction with curriculum goals. *DreamBox Math* includes educator guidance to implement these methods effectively within a MTSS framework.

The *DreamBox Math* instructional materials include enrichment and extension methods that support various forms of engagement and provide guidance for effective implementation. Instructional materials align with the MTSS framework and are designed to promote critical thinking and support student growth. Educator tools offer strategies to create challenging, engaging learning environments for all students. This guidance is found on the *DreamBox* Reviewer Site under "Supports for All Learners," where the "Multi-Tiered Intervention" section describes how teachers can assign personalized lessons and use adaptive technology to meet individual student needs.

The *DreamBox* Reviewer Site under "Supports for All Learners" states that the program adapts based on student responses, strategies used, and response time. Each student receives a unique lesson experience tailored to individual performance. The program automatically provides extension or enrichment activities based on how the student answers questions during the activity.

### **3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.**

The *DreamBox Math Implementation Guide*, located under Resources, includes prompts to support educators in providing timely feedback during lesson delivery. For example, teachers are prompted to ask questions such as "Do you have a hint button available?" to guide students toward built-in program feedback. These prompts help educators monitor progress and encourage students to use available supports during instruction.

The *DreamBox* platform includes prompts and guidance to support educators in providing timely feedback during lesson delivery. The article "*DreamBox Math* Teacher-Student Messaging: How Do I Incorporate Messaging into My Instruction?" offers sample prompts educators can use to respond to student work. Online tools also guide educators in recording and delivering feedback during or after digital lessons.

### 3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021, update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	This guidance is not applicable to the program.	N/A
3.3b	The materials do not contain embedded linguistic accommodations for two of the levels of proficiency, High Intermediate and Advanced, as outlined by the ELPS.	2/4
3.3c	The materials do not contain explicit implementation guidance to support educators using DreamBox materials in a state-approved bilingual/ESL program.	0/1
3.3d	All criteria for guidance met.	8/8
3.3e	This guidance is not applicable to the program.	N/A
—	<b>TOTAL</b>	10/13

**3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.**

This guidance is not applicable because the program is not designed to be static.

**3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.**

*DreamBox Math* instructional materials include embedded linguistic supports aligned with the English Language Proficiency Standards (ELPS) for Pre-Production, Beginning, and Intermediate proficiency levels. In the lesson for K.8.C.i "Draw Conclusions from Real-Object Picture Graphs, Narrative Lesson," instructional guidance recommends specific strategies to support emergent bilingual students, such as structured partner discussions, annotated visuals, and explicit vocabulary instruction. Lessons pre-teach key math terms using visuals, definitions, and examples, with clickable terms for immediate clarification. Visual aids such as charts, graphs, and diagrams support comprehension, while instruction builds academic language through repetition, contextual use, and opportunities for students to explain their reasoning. *DreamBox Math* instructional materials include embedded linguistic accommodations for Pre-

Production, Beginning, and Intermediate levels of language proficiency, as outlined in the ELPS. In grade K, standard K.6D "Geometry and Measurement," students use an interactive glossary to access visual supports and definitions for key geometry terms as they build shapes. New vocabulary is added to the glossary throughout the lesson, supporting vocabulary acquisition and concept development. Instructional supports include simplified language, extended think time, and structured opportunities to engage with academic language at increasingly complex levels.

Instructional materials do not include embedded linguistic accommodations for two of the levels of proficiency, High Intermediate and Advanced, as outlined by the ELPS.

### **3.3c – Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.**

*DreamBox Math* instructional materials provide a resource document, *Emergent Bilingual Support Article: Supporting English Language Learners Using DreamBox Math*, that includes guidance on exploring digital manipulatives, integrating *DreamBox* into instructional schedules, and offering Spanish and English language options for students. The document does not reference or align with state-approved bilingual or ESL program models.

In the lesson "Teacher Narrative K–2B: Counting Objects," *DreamBox Math* provides general accommodations that are not tailored to specific language proficiency levels. For example, teacher narratives recommend strategies such as having students pair up to generate responses but do not include specific guidance aligned to the needs of emergent bilingual students. These strategies are applied uniformly rather than differentiated according to the ELPS.

### **3.3d – Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse.**

In the *DreamBox Math* grade K lesson for K.2B "Counting Beyond with Choral Counting," *DreamBox Math* presents math racks to students. Students are asked to build a number on a math rack and select the numeral below. If a student is unsuccessful, *DreamBox Math* pronounces the numeral and covers the other side of the math rack. This practice helps build background knowledge and prepares students for upcoming lessons.

In the lesson for K.6A "Identifying Rectangles and Triangles," *DreamBox Math* provides English-language explanations for unfamiliar terms. Students receive support for developing academic vocabulary, increasing comprehension, and building background knowledge through written and oral discourse.

In the lesson for K.2B "Counting Beyond with Choral Counting," *DreamBox Math* includes embedded guidance to support emergent bilingual students in increasing comprehension through oral and written discourse. The lesson directs teachers to circulate during partner discussions to assess oral explanations

and to collect written definitions as a formative assessment. These practices allow students to process and express their understanding of three-dimensional shape attributes through multiple modalities.

*DreamBox Math* includes embedded guidance to support emergent bilingual students in developing academic vocabulary through oral and written discourse. The *DreamBox* website states, "*DreamBox* integrates academic vocabulary throughout its lessons. Visuals, audio supports, and guided prompts encourage students to express reasoning and engage in mathematical discourse." These features promote the use of academic language as students interact with content.

The Vocabulary Instructional Routine encourages oral and written discourse in mathematics, supporting students in making cross-linguistic connections through these opportunities.

**3.3e – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.**

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

## 4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

### 4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
—	TOTAL	6/6

#### **4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.**

*DreamBox Math* grade K instructional materials provide practice opportunities throughout the learning pathways that require students to demonstrate depth of understanding aligned with the Texas Essential Knowledge and Skills (TEKS). In the grade K lesson for K.2.1, students compose and decompose numbers up to 10 using digital manipulatives and drag-and-drop objects, such as counters and digital blocks, to identify multiple combinations for the same number.

*DreamBox Math* grade K Activity Feed serves as a continuous formative assessment, recording completed lessons and the level of understanding demonstrated.

*DreamBox Math* grade K students engage with various formative assessments containing TEKS-aligned tasks and questions with more than two levels of complexity. Each *DreamBox Math* lesson is categorized as "Exploring and Sense Making," "Looking for Structure and Relationships," or "Fluency, Application, and Procedural Skills."

The Continuous Formative Assessment tab under the Instructional Assessments tab on the Reviewer Site states, "Through interactive item types of varying complexity levels, *DreamBox* collects data points from each student's interactions to evaluate the strategies used to solve problems."

#### **4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.**

*DreamBox Math* grade K instructional materials include practice opportunities throughout the learning pathways that require students to demonstrate depth of understanding aligned with the TEKS. *DreamBox Math* states, "Every lesson in *DreamBox Math* is aligned to the TEKS Readiness Standards for grades K–5. Adaptive technology personalizes learning paths for each student, meeting them at their skill level and advancing them through carefully scaffolded, increasingly complex concepts."

*DreamBox Math* grade K students access instructional assessments throughout the learning pathways that require them to demonstrate depth of understanding aligned with the TEKS. *DreamBox Math* states, "*DreamBox* assessment is based on student's demonstrated understanding, not just correct answers. Each lesson contains measurable learning objectives aligned to the TEKS, where student evidence is showcased in what they answer, what they do, and how they show their thinking."

*DreamBox Math* grade K questions and tasks increase rigor and complexity, supporting progress toward above-grade-level proficiency in the mathematics TEKS. The *Teacher Guide* states that students are expected to achieve one and a half years of growth if they complete five weekly lessons.

*DreamBox Math* resource "Students Working in Multiple Grade Levels" states, "*DreamBox Math* was designed to focus on progress and growth so students can, and often do, work in multiple grade levels simultaneously. Our lessons 'grade levels' are largely based on your state standards that *DreamBox Math* aligns with. They are not meant to represent a static order in which lessons are offered. For example, a student who understands place value but has difficulty counting items in groups may be assigned earlier work that nurtures the ability to count in groups while simultaneously working on higher grade-level lessons that build upon their place value knowledge." This indicates that students may engage in enrichment and extension activities in some mathematical domains while continuing on-grade-level work in others.

## 4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	6/6

### 4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.

The *DreamBox Math* instructional materials demonstrate horizontal coherence by intentionally sequencing related mathematical concepts within the same grade level. In Lesson K-2, for example, students begin by ordering numbers on a number line, a foundational skill that builds number sense and an understanding of relative magnitude. This understanding is then extended as students place numbers on a hundreds chart, reinforcing patterns in place value and numerical structure. Finally, students represent numbers using a math rack and identify the corresponding numeral, integrating visual models with symbolic representation. This progression supports the development of a coherent understanding of number concepts through multiple representations and interconnected tasks.

The Reviewer Site illustrates within-grade-level coherence by noting that "*DreamBox* develops procedural fluency by enabling students to explore multiple pathways to a solution and encouraging strategic flexibility. Students engage with models, manipulatives, and symbolic representations to build efficiency, accuracy, and confidence." The materials also demonstrate horizontal coherence across concepts within the grade level by connecting patterns, big ideas, and relationships among tallies, graphs, and word problems.

The *DreamBox Math* grade 2 instructional materials demonstrate horizontal coherence across concepts in second grade by sequencing lessons that build upon one another conceptually. In Lesson 2.2B, students begin by decomposing numbers by place value, reinforcing their understanding of base-10 structure. This is followed by activities that require students to identify a number based on its decomposition, strengthening their ability to make connections between parts and wholes. Finally, students engage in tasks that involve correcting decompositions presented in a table format, allowing them to apply their knowledge in a structured and analytical context. This progression supports a coherent development of place value understanding within the grade level.

The *DreamBox Math* instructional materials demonstrate horizontal coherence by intentionally connecting patterns, big ideas, and relationships within the same grade level. Lessons are sequenced to build conceptually, reinforcing understanding through recurring models, representations, and mathematical language. This design enables students to deepen their comprehension of foundational skills while making meaningful connections across related content areas. According to *DreamBox*, "Learning



progressions are developed along vertical (across grade levels) and horizontal (within a grade level) axes, promoting connections across domains and supporting increasing complexity as students move toward algebra readiness." This dual-axis structure ensures that students not only revisit key concepts from multiple perspectives within the grade level but also experience a logical progression of ideas that supports long-term mathematical growth. Through this coherent approach, the curriculum fosters conceptual understanding that extends beyond isolated skills, helping students apply their learning across various mathematical concepts.

#### **4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grade K–6, by connecting patterns, big ideas, and relationships.**

In the *DreamBox Math* grade K instructional materials, within the "Numbers and Operations" domain, students are introduced to representing numbers using a math rack. This visual model supports the early development of number sense by helping students recognize quantities, subitize, and build a foundational understanding of part-whole relationships. As students advance to grade 1, they continue to engage with math racks to compare numbers, building on their prior experiences with the tool to deepen their understanding of numerical relationships and magnitude. This instructional progression illustrates vertical coherence across grade levels, as *DreamBox Math* leverages familiar manipulatives to introduce increasingly complex concepts. By maintaining consistency in representations while advancing the mathematical demands, the curriculum supports cognitive continuity and concept development, ensuring that students connect new learning to previously established knowledge across grade bands.

According to the *DreamBox* article "Students Working in Multiple Grade Levels" in *DreamBox Math*, "*DreamBox Math* was designed to focus on progress and growth so students can, and often do, work in multiple grade levels at the same time . . . For example, a student who understands place value but has difficulty counting items in groups may be assigned earlier work that nurtures the ability to count in groups while simultaneously working on higher grade-level lessons that build upon their place value knowledge." This design reflects the adaptive approach of *DreamBox Math*, which tailors the learning experience to each student's demonstrated needs rather than confining them to a static grade-level progression. As students demonstrate proficiency in certain concepts, they are advanced to more complex material, while gaps in understanding prompt targeted support at earlier levels. In doing so, *DreamBox Math* ensures that students move fluidly across grade levels within each mathematical domain, engaging with content that aligns with their readiness and promoting deeper understanding. This individualized progression supports both remediation and enrichment, allowing students to access appropriately leveled instruction within each concept area as they build toward long-term mastery.

Within the *DreamBox Math* grade 2 curriculum under the "Numbers and Operations" domain, students develop strategies for solving addition and subtraction problems by making jumps on a number line. This visual and conceptual tool supports students in understanding the composition and decomposition of numbers, reinforcing number sense and flexible thinking. As students progress to grade 3, they continue

to utilize number lines—this time to represent multiplication through repeated jumps, extending their prior knowledge to a more complex operation. This instructional design exemplifies vertical coherence across grade levels, as familiar models are repurposed to introduce new mathematical concepts. By building upon previously established representations, *DreamBox Math* ensures that students experience continuity in their learning, facilitating a deeper and more connected understanding of mathematical ideas across grade bands.

#### **4.2c – Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.**

In *DreamBox Math* grade K, the instructional materials connect prior knowledge to the concepts and procedures introduced at the current grade level. In the teacher narrative for Lesson K.6A, instruction begins with a review of the concept of shapes and the foundational skill of naming basic geometric figures. This review sets the stage for introducing the grade-level concept of identifying two-dimensional shapes, including recognizing squares as a special type of rectangle. By activating prior knowledge and then extending it to more precise classifications, the lesson supports students in developing a deeper understanding of geometric relationships. This approach not only aligns with grade K learning goals but also lays the groundwork for future geometry standards that require students to analyze and compare attributes of shapes and reason about their properties in more complex ways.

The *DreamBox Math* instructional materials demonstrate vertical coherence across grade levels by systematically building on students' prior knowledge through the consistent use of visual models, representations, and strategies. In grade 1, within the "Numbers and Operations" domain, students compare numbers shown on math racks. This instructional strategy directly connects to concepts introduced in grade K, where students first represent numbers using math racks to develop number sense and understand part-whole relationships. By continuing to use the same manipulative in a more analytical context, *DreamBox Math* reinforces familiarity while deepening conceptual understanding. In grade 3, students apply these foundational skills to more complex operations by using jumps on a number line to represent multiplication. This lesson sequence draws directly on prior learning in grade 2, where students solve addition and subtraction problems using the same number line model. By extending the use of number lines from additive reasoning to multiplicative reasoning, *DreamBox Math* provides continuity in representation while scaffolding new concepts. Through these intentional instructional progressions, *DreamBox Math* ensures that students revisit familiar tools and strategies in increasingly complex contexts. This coherence across grade levels supports long-term retention, conceptual depth, and readiness for future mathematical learning.

*DreamBox Math* effectively connects prior knowledge to the concepts and procedures introduced at the current grade level. In the "Numbers and Operations" lesson within 2.4C, instruction begins with a brief review of foundational addition concepts, reinforcing previously learned material. This review is followed by a simple computation problem designed to activate prior understanding and prepare students for

more complex tasks. The lesson then transitions to the current grade-level objective of solving word problems involving three-digit addition. Throughout the lesson, a variety of developmentally appropriate strategies and procedures are employed to support student comprehension and application, ensuring that instruction is both accessible and aligned with grade-level expectations. This structured progression reflects the *DreamBox Math* commitment to building conceptual continuity while advancing mathematical rigor.

## 4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
—	TOTAL	4/4

### 4.3a – Materials provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways.

The article "How Students Can Lose Progress in *DreamBox Math*" states that if a student loses progress, the system provides an opportunity to review previously introduced concepts that have not yet been retained. This function is built into the program's adaptive learning model.

According to the information provided in the question mark pop-up next to the "All Lessons" heading, *DreamBox Math* includes spaced retrieval by revisiting prior content across learning pathways. This feature allows students to re-engage with skills and concepts at multiple points in their progression.

*DreamBox Math* delivers varied permutations of lessons, rather than repeating identical problems. This design aligns with the Texas Essential Knowledge and Skills (TEKS), and supports the program's structured approach to reinforcing student understanding through repeated exposure to aligned content.

### 4.3b – Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways.

*DreamBox Math* instructional materials provide interleaved practice with previously introduced skills and concepts across multiple grade levels. This structure enables recurring exposure to content through varied contexts as part of the program's adaptive learning design.

The math rack is used in grade K and grade 1 to compare numbers. In grade 2, number comparison continues using a number line divided into intervals of 5s and 10s, reflecting consistent use of visual-spatial models to support numerical reasoning.

Graphing and data analysis are interleaved across grades. In grade K, students create graphs and draw conclusions. In grade 1, students generate and answer questions based on data and continue drawing conclusions. In grade 2, students use data representations to write and solve one-step word problems.

## 5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

### 5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	2/2
5.1c	All criteria for guidance met.	1/1
—	TOTAL	6/6

#### 5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

*DreamBox Math* instructional materials include questions and tasks that provide opportunities for students to interpret models and representations of mathematical concepts and situations. In a grade K "Just Started" lesson aligned to standard K.8C, students interpret visual representations by examining the structure and function of tally charts. The lesson focuses on drawing conclusions from real-object and picture graphs, requiring students to recognize how data is organized and represented.

*DreamBox Math* instructional materials also include opportunities for students to analyze mathematical representations. In the same grade K lesson for K.8C, students respond to comprehension questions after a chart is created. One task prompts students to identify the category with the fewest tallies, requiring analysis of the completed graph. Tasks requiring students to evaluate representations were not present in the materials reviewed for grades K–2.

#### 5.1b – Questions and tasks provide opportunities for students to create concrete models and pictorial representations to represent mathematical situations.

*DreamBox Math* grade K instructional materials include questions and tasks that provide opportunities for students to create pictorial representations to represent mathematical situations. The materials are available on the Educator and Administrator Demo Experience website. In the lesson "Building Sets with Pictorial Models—Lesson 3," the Teacher Narrative states, "Explain to students that today they will be creating sets using pictures to represent numbers. Introduce the concept of a pictorial model and how it can help us understand numbers better." The lesson provides direct guidance for students to use pictures to model numerical values, supporting the development of foundational mathematical representations.

Questions and tasks provide opportunities for students to create concrete models and pictorial representations to represent mathematical situations. In Lesson K.2A, grade K students demonstrate understanding of data collection by using tally marks to gather and record information. The activity

requires students to represent counted quantities using a concrete model, allowing them to visually organize and communicate mathematical data.

### **5.1c – Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.**

Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. In Lesson K.8A, grade K students apply their understanding of data collection by using tally marks to gather and record information. In Lesson K.7B, students demonstrate their understanding of the concepts of shorter and taller by ordering models or pictures of animals and objects by height. These tasks require students to transfer and apply conceptual knowledge to represent and solve problems in unfamiliar contexts.

*DreamBox Math* instructional materials provide opportunities for students to apply conceptual understanding to new problem situations and contexts. In the grade K lesson "Solving Word Problems with Sums up to 10," the teacher is directed to "Present the first word problem: 'You have three apples, and your friend gives you two more. How many apples do you have now?' Allow students to use their objects to solve the problem. After a few minutes, ask volunteers to share their strategies for finding the sum. Write their strategies on the board." This task requires students to apply their understanding of addition by using physical objects to model and solve a real-world problem.

## 5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
—	TOTAL	9/9

### 5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks.

The *DreamBox Math* instructional materials provide tasks designed to build student fluency and automaticity needed to complete grade-level mathematical tasks. One of the three lesson types, found in "What Kinds of Lessons Will Educators See in the Lesson Types Column?" under "Fluency, Application, and Procedural Skills," focuses on practicing skills students have already demonstrated they understand. These lessons support the development of fluency and flexibility through repeated, targeted practice.

The *DreamBox Math* grade K lesson aligned to K.3.D provides tasks designed to build automaticity and fluency required for grade-level mathematical tasks. Students complete equations by identifying missing numbers using visual dot representations. A hint feature briefly flashes the missing number of dots, supporting number recognition and reinforcing fluency through repeated visual practice.

### 5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

*DreamBox Math* grade K lesson for K.7.B provides opportunities for students to apply efficient, flexible, and accurate mathematical procedures. In the "In Progress" lesson, students order objects by size and adjust their placements when errors occur. The prompts guide students to correct their work and complete the task with accuracy.

The *DreamBox Math* grade K lesson for K.3.A provides opportunities for students to apply efficient, flexible, and accurate mathematical procedures. Students use a math rack and a 10 frame to add and subtract, supporting the development of number sense and fact fluency. These tools promote subitizing and flexible problem-solving strategies throughout the learning pathway.

### 5.2c – Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.

The *DreamBox Math* grade K lesson "Drawing to Solve Word Problems" in K.3.B provides opportunities for students to evaluate mathematical representations, strategies, and solutions for efficiency, flexibility, and

accuracy. The teacher narrative prompts educators to ask students to share their drawings and explain their problem-solving strategies. The discussion highlights different approaches and supports students in analyzing and refining their methods.

The *DreamBox Math* grade K lesson in K.3.B provides opportunities for students to evaluate mathematical representations, strategies, and solutions for efficiency, flexibility, and accuracy. In word problem activities, students choose whether to simplify, rewrite, or rearrange terms to solve equations they create. Teacher narratives guide educators to prompt students to share their drawings, explain their strategies, and justify their reasoning.

## **5.2d – Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems.**

The *DreamBox Math* instructional materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems. *DreamBox Math* provides interactive tools, such as number lines, area models, and base-ten blocks, to help students visualize concepts and explore multiple strategies. These tools guide students toward more abstract and efficient problem-solving methods.

The *DreamBox Math* instructional materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems. Individualized learning pathways offer targeted practice, while scaffolding and feedback provide step-by-step guidance and strategy-based hints. These hints prompt students to consider more effective problem-solving strategies.

The *DreamBox Math* grade K lesson for K–2.B in "Numbers and Operations" contains guidance to support students in selecting increasingly efficient approaches to solve mathematics problems. Students begin by counting to 10 using a math rack and progress to building numbers up to 20 on 10 frames. Instructional materials encourage the use of efficient bead groupings to develop number sense and problem-solving efficiency.



## 5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	The materials do not contain an explanation of why or how the conceptual and procedural emphasis is addressed for the TEKS.	0/2
5.3b	All criteria for guidance met.	3/3
5.3c	All criteria for guidance met.	6/6
—	<b>TOTAL</b>	9/11

### 5.3a – Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

The materials do not provide an explanation of why or how the conceptual understanding supports the procedural emphasis of the Texas Essential Knowledge and Skills (TEKS).

### 5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.

In grade K, standard K–2B, the teacher narrative in "Counting with Objects: Representing Numbers 0–20" directs students to count objects to show a number and then draw objects to represent that number. This activity provides opportunities to connect concrete and pictorial representations. Students develop number sense by moving between physical and visual models.

In grade K, standard K–3B, the "In Progress" lesson provides an activity where students drag and drop numbers and symbols to create a number sentence that matches a given word problem. This task supports the use of abstract representations as required by the TEKS. Students apply symbolic reasoning to represent mathematical relationships.

In grade K, standard K–3B, the teacher narrative in "Solving Word Problems with Sums up to 10" directs students to use counting objects, such as blocks or counters, to solve problems. The "Just Started" online lesson for the same standard provides a pictorial model using beads to support problem solving. These tasks offer opportunities to use concrete and pictorial representations as required by the TEKS.

### 5.3c – Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

In grade K, *DreamBox Math* instructional materials support students in connecting representational models to abstract concepts, as required by the TEKS. In standard K.2B, students use math racks to represent numbers in "Representing Numbers 8 to 20 Strategically with a Math Rack." In standard K.3A,

students extend this work by solving addition and subtraction problems using the math rack, linking visual models to symbolic representations.

In grade K, standard K.2I, the lesson "Representing Numbers with a Pattern of Dots and Identifying the Numeral" prompts students to count dots and select the corresponding numeral. This task supports the connection between pictorial and abstract representations. Students apply visual counting to identify symbolic numbers.

## 5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
—	TOTAL	8/8

### 5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies.

Instructional materials provide opportunities for students to develop academic mathematical language using visuals and other language development strategies. In the "Just Started" lesson for K–2H, students view bead models to explore the terms more and less. The program then presents an additional visual, such as a 10 frame, to reinforce vocabulary and support concept development regardless of student response.

*DreamBox Math* materials provide opportunities for students to develop academic mathematical language through embedded supports such as visuals, audio prompts, and guided discourse. *DreamBox* states, "*DreamBox* integrates academic vocabulary throughout its lessons. Visuals, audio supports, and guided prompts encourage students to express reasoning and engage in mathematical discourse." Educator tools, including printable glossaries and "Lesson Highlights," further scaffold and extend language development.

### 5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

In "Geometry and Measurement" K.6.A, Teacher Narrative "Exploring Two-Dimensional Shapes – Lesson 1," *DreamBox Math* includes educator guidance to extend students' use of academic vocabulary. Teachers are directed to have students discuss shape categories with a partner, draw and label examples and non-examples, and share their work. These tasks support vocabulary development through collaborative conversation and visual representation.

In the lesson "Counting with Objects: Representing Numbers 0–20" (K.2.B), students share observations about number patterns with a partner and represent their favorite number using drawings and manipulatives. These tasks provide opportunities for students to use academic mathematical vocabulary in both verbal and visual forms. Students engage in discourse and representation to support vocabulary development.

The *DreamBox Math* instructional materials include Vocabulary Instructional Routines that provide sentence stems to support and scaffold student discourse with peers.

#### **5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.**

In "Numbers and Operations" K.2.B, the lesson "Counting with Objects – Lesson 1" includes embedded guidance to support the use of academic vocabulary in discourse. Students write or draw an observation about numbers or patterns, share with a partner, and then discuss their ideas with the class. These activities promote the application of mathematical language through visual, oral, and written expression.

In "Numbers and Operations" K.2.B, the lesson "Counting Beyond with Choral Counting" includes embedded guidance to support the use of academic vocabulary in discourse. Students write about a pattern they noticed and a prediction they made, then share with a partner, and the class. These tasks promote the application of mathematical language through individual reflection and structured discussion.

#### **5.4d – Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.**

*DreamBox Math* instructional materials include embedded guidance to facilitate mathematical conversations and promote the use of academic vocabulary with peers. *DreamBox* states, "*DreamBox* integrates academic vocabulary throughout its lessons. Visuals, audio supports, and guided prompts encourage students to express reasoning and engage in mathematical discourse." Educator tools, such as printable glossaries and "Lesson Highlights," help scaffold and extend language development.

*DreamBox Math* instructional materials include embedded guidance to facilitate mathematical conversations by providing opportunities for students to explain their reasoning and use academic vocabulary with peers. In "Geometry and Measurement" K.6.E, Teacher Narrative "Exploring Rhombuses: Attributes and Definitions," students examine examples and non-examples of irregular three-dimensional figures, then discuss and justify their classifications with a partner. This activity supports mathematical discourse through observation, explanation, and peer collaboration.

#### **5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.**

Under the Resources tab, educators can access the document titled *Feedback for Students*, which outlines how *DreamBox Math* provides in-lesson scaffolding to support students when responses are incorrect. The document includes sample questions, exemplar student responses, and suggestions for guiding students to use embedded supports.

In K.7.A, under "Number and Operations," the *Curriculum Guide* includes guidance to anticipate student strategies and support or redirect inaccurate responses as students order objects from shortest to tallest. When students answer incorrectly, the program provides vocabulary support and visual examples to reinforce understanding. These prompts help clarify key terms and guide students toward the correct outcome.

## 5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	4/4

### 5.5a – TEKS process standards are integrated appropriately into the materials.

*DreamBox Math* instructional materials include a description of how the Texas Essential Knowledge and Skills (TEKS) process standards are embedded across learning pathways. The *Curriculum Guide* states, "Every *DreamBox* lesson is aligned to TEKS Readiness Standards for grades K–5, ensuring students not only learn math content but also develop problem-solving, reasoning, and communication skills." The guide also highlights how lessons "progress from early sense making to fluency and application, supporting educators with both structure and flexibility."

TEKS process standards are integrated appropriately into the materials. In the grade K Lesson K.6.A, "Exploring Two-Dimensional Shapes – Lesson 2," students classify and sort squares and rectangles as examples and non-examples, draw their own representations, and orally explain their reasoning with a partner. This activity supports both content understanding and development of communication skills.

### 5.5b – Materials include a description of how process standards are incorporated and connected throughout the learning pathways.

The *DreamBox Math* instructional materials include a description of how process standards are incorporated and connected throughout the learning pathways. The *Process Standards Alignment* guide outlines how lessons and virtual manipulatives align with the TEKS mathematical process standards. This annotated table provides specific examples of student engagement in problem solving, reasoning, and communication. The guide supports educators in understanding how process standards are embedded across instructional content.

The *DreamBox Math* Teacher Narrative: "Representing Numbers with Objects" references the process standards at the start of the lesson and connects them to real-life applications for students.

### 5.5c – Materials include an overview of the TEKS process standards incorporated into each lesson.

In the Teacher Experience under *Curriculum Guide*, "Number and Operations," the TEKS are listed with lessons that align with that curriculum standard.

In addition, the materials provide a "TEKS Alignment" subsection within the Reviewer Site under the Instructional Design tab. On this page, the article "Mathematical Process Standards" gives educators an overview of the TEKS process standards, along with examples of *DreamBox Math* lessons that engage students with them. A table also shows how select lessons incorporate and align with these process standards.

## 6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

### 6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	3/3
6.1c	All criteria for guidance met.	3/3
—	<b>TOTAL</b>	9/9

#### 6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

*DreamBox Math* instructional materials provide opportunities for students to think mathematically, persevere through solving problems, and make sense of mathematics. The website states, "Rather than progressing through isolated memorization of facts, students are supported in building cognitive maps of connected ideas, allowing for deeper understanding and retention." The curriculum is intentionally designed with vertical and horizontal coherence and is adaptive, reflecting the dynamic nature of student thinking.

*DreamBox Math* instructional materials provide opportunities for grade K students to make sense of mathematics through open-ended questions, problem-solving tasks, and visual representations that support conceptual understanding. In Lesson K.3B, "Solving Word Problems with Sums up to 10," students solve problems independently using objects, then discuss their strategies with a partner. The teacher selects students to share their strategies with the class, and repeats this process across four problems with increasing complexity.

#### 6.1b – Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks.

*DreamBox Math* instructional materials support students in understanding, explaining, and justifying that there are multiple ways to solve problems and complete tasks. The website states, "Using interactive tools, students engage in flexible thinking and use multiple strategies to solve a problem rather than following a single method." This approach encourages students to explore various solutions and develop a deeper understanding of mathematical concepts.

*DreamBox Math* instructional materials support grade K students in justifying and explaining that there are multiple ways to solve problems and complete tasks. In Lesson K.3B, "Solving Word Problems with Sums up to 10," students solve problems independently using objects, then discuss their strategies with a



partner, and share with the class. This process allows students to explain their thinking and justify why their chosen strategy was effective.

**6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and/or educators.**

*DreamBox Math* instructional materials are designed to require students to make sense of mathematics through multiple opportunities to engage in, write about, and discuss math with peers and educators. In Lesson K.2B, "Counting Beyond with Choral Counting," students reflect on the counting activity by writing about a pattern they noticed and a prediction they made. They then share their reflections with a partner, and selected students present their thoughts to the class.

*DreamBox Math* instructional materials provide structured opportunities for grade K students to articulate their mathematical thinking through verbal and written explanations, reflections, and justifications. In Lesson K.2A, "Comparing Numbers to 100," the teacher prompts students to consider multiple strategies by stating, "So one strategy we can use to solve this problem is to draw a picture of the problem and count to find the answer. Does anyone know a different strategy to find the answer?" This encourages students to explain their thinking and explore alternative methods for solving problems.

## 6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	All criteria for guidance met.	4/4
—	TOTAL	10/10

### 6.2a – Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

*DreamBox Math* instructional materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations and justifications. The website states, "*DreamBox* assessment is based on students' demonstrated understanding, not just correct answers. Each lesson contains measurable learning objectives aligned to the Texas Essential Knowledge and Skills (TEKS) where student evidence is showcased in not only what they answer, but in what they do and how they show their thinking." To be marked proficient, students must consistently show mastery across multiple lesson types, including early sense-making, exploration, recognition of structure and relationships, and procedural fluency.

*DreamBox Math* instructional materials support educators in guiding students to share and reflect on their explanations and justifications. In Lesson K.2I, "Composing Numbers with Pictures," students independently compose the number seven using pictures, then share their strategies with a partner and the class. They are encouraged to explain how they combined pictures to reach the total. This process supports students in justifying their thinking and evaluating the effectiveness of different strategies. The *Teacher Guide* supports students in sharing and reflecting on their arguments, explanations, and justifications during instruction. The English Language Proficiency Standards (ELPS)-aligned Teacher Narratives specifically address this by providing guidance for teachers.

### 6.2b – Materials include prompts and guidance to support educators in providing explanatory feedback based on student responses and anticipated misconceptions.

*DreamBox Math* instructional materials include prompts and guidance to support educators in providing explanatory feedback based on student responses and anticipated misconceptions. The website states, "Just-in-time support in *DreamBox* promotes error analysis and self-correction and facilitates productive struggle." Hints and real-time scaffolding encourage students to pause, reflect, and respond to feedback before continuing the lesson.

*DreamBox Math* instructional materials provide prompts and guidance to support educators in addressing anticipated misconceptions. For standard K.2I, a common misconception is reciting numbers without connecting the number name to its corresponding quantity. The "Just Started" lesson addresses this by

prompting students to select the correct numeral that matches a given visual representation, reinforcing number-to-quantity understanding.