

Progress Learning LLC

Supplemental English Mathematics, Geometry

Progress Learning Geometry (TEKS)

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	9781953417077	Digital	Static

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	150	3	Flags Addressed	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	23 out of 23	100%
2. Progress Monitoring	23 out of 24	96%
3. Supports for All Learners	33 out of 39	85%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	35 out of 38	92%
6. Productive Struggle	21 out of 21	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	2	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	2	0	0
5. Protecting Children's Innocence	8	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	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	TOTAL	14/14

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 "Geometry Scope & Sequence" located within the Instructional Resources, outlines the concepts covered within the course, the corresponding Texas Essential Knowledge and Skills (TEKS), and a sequence rationale for the 15 lessons. The lesson rationale includes connections to previously learned material, as well as connections between the lessons. For example, Lesson 6 states, "students build on their understanding of transformations from Lesson 4 and logical reasoning from Lesson 5 to prove triangle congruence and develop key theorems related to triangles."

The lesson plan located within the Instructional Resources for each of the 10 topics outlines the TEKS, English Language Proficiency Standards (ELPS), and concepts covered within the "Objectives and Standards" section. Each lesson plan also provides a vertical alignment by "looking back" at previously learned TEKS and by "looking ahead" at future TEKS.

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

The "Implementation Guide," located within the Instructional Resources, outlines the structure of each of the 15 lessons, which follow the 5E Instructional model with details on implementing each phase of the lesson.

The "Implementation Guide," located within the Instructional Resources, provides guidance on implementing each of the 5Es: Engage, Explore, Explain, Elaborate, and Evaluate, which includes usage recommendations in different classroom contexts, such as whole group or individually.

The "Implementation Guide," located within the Instructional Resources, includes protocols following each lesson for suggested activities for both intervention and enrichment.

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

The "Geometry Scope & Sequence" located within the Instructional Resources provides a TEKS correlation guide indicating the geometry TEK coverage by lesson.

The "Assessment Center" includes two diagnostic assessments with recommended skill entry points based on diagnostic results. Each question directly correlates to the provided lessons. For example, pretest question 1 correlates with Lesson 10: "Circles," providing the teacher with guidance to support student needs based on diagnostic assessment results.

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

The "Explore Teacher Guide," located within the Instructional Resources, for each of the 15 topics includes detailed teacher guidance outlining student objectives, materials needed, guiding questions, common misconceptions, and implementation suggestions for each component of the 5E model. The guide provides step-by-step guidance on implementing the material as designed, which includes "important cues for when to pass out specified materials, which cooperative learning strategies to use, and identifies key moments in the lesson for when to listen and check for student understanding."

The "Geometry Scope & Sequence," located within the Instructional Resources, provides a rationale for all 15 lessons. The rationale describes what concepts are covered in the lesson and how they relate to the course as a whole to help teachers internalize the mathematical knowledge students will gain from the lesson. For example, Lesson 7 states "students derive and apply the formulas for distance, slope, and midpoint in the coordinate plane, building on their understanding of parallel and perpendicular slopes from lesson 1."

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

The Help Center provides resources, such as an "Administrator Quick Start Guide," to help instructional leaders facilitate effective use of the program. The quick start guide includes a general overview of the progress reports using a Dot Rank system at the school, teacher, and student levels. The "color-coded dot

rank system indicates areas of strength and weakness for your school," which can be used to monitor and guide implementation.

The "Training and Professional Development" includes on-demand training videos for administrators on topics such as "District Admin 101" and "Data Dive."

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	7/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	TOTAL	9/9

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.

The lesson plan located within the Instructional Resources, for each of the 15 topics includes detailed plans outlining objectives, the TEKS, ELPS, process and language supports, vocabulary, vertical alignment, and lesson resources, which provide "a short description of the resources that will be needed," many of which include direct links. The lesson plan located within the Instructional Resources, includes suggested activities for each component of the 5E model with direct links and approximate timing. For example, Lesson 2: "3D Objects and Dimensional Changes," suggests spending 5 minutes on the "Engage" by projecting content-specific questions to the class and utilizing Think-Pair-Share to activate prior knowledge.

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.

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

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 "Support for Families," located within the Instructional Resources, provides strategies and activities for families in English and Spanish to use at home to support students' learning and development for each unit by sharing the class slides through a QR code and providing questions to ask their student(s) about in-class learning. For example, Lesson 12 suggests, "Talk about examples like ladders or ramps and ask your child how they could find a missing side or angle using triangle 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 provide content and language supports to support individual students.	3/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	TOTAL	15/16

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

The "Implementation Guide," located within the Instructional Resources, provides the intended purpose for the types of instructional assessments. For example, "The lesson plan references Learning Snapshots for the instructor, which are Progress Learning's formative assessments with items aligned to the standards in each lesson and were written with the intent of mirroring the rigor, verbiage, and cognitive complexity of the questions on STAAR EOC assessments." The guidance states that "Learning Snapshots" provide teachers with the opportunity to observe whether students have a complete understanding of the concepts covered in each lesson.

The "Implementation Guide" within the Instructional Resources provides an overview outlining the definitions and intended purpose of all instructional assessments available. For example, the guide describes the 'Assessment Reflection Tool' as a formative assessment designed to help students reflect on their learning snapshot performance."

The "Implementation Guide," located within the Instructional Resources, provides "a variety of cooperative and interactive learning strategies" that can be used for formative assessments such as Think-Pair-Share.

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

Within the Help Center, guidance is provided on utilizing the Assessment Builder, which allows you to hand-select the questions based on domains and grade-level standards to ensure accurate instructional assessments.

Within the Help Center, there is a section on assessments that details the Live Monitoring feature, which outlines teachers' ability to monitor what students are working on in Progress Learning in real time. The monitoring feature allows teachers to ensure consistent and accurate administration of instructional assessments.

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.

Digital assessments created in the Assessment Center can be previewed and printed to support all students.

Within the Student Settings on the Teacher Dashboard, teachers have access to toggle the text-to-speech setting on or off for individual students.

Within the Assessment Builder Settings, "teachers can allow students to have access to a Desmos online calculator." Teachers can also enable specific calculators (basic 4-function, scientific, or graphing) for individual students when assigning an assessment.

The materials do not provide content and language supports. While the Assessment Center does allow the language to be changed, specific supports, such as pop-ups that simplify or clarify language, are not provided.

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

The Assessment Center includes two diagnostic assessments (pretest and posttest) with TEKS-aligned tasks and questions, including interactive item types with varying DOK levels. Each assessment consists of two items for most TEKS to generate Focus Areas, to provide individualized learning paths based on student performance. Question item types include multiple choice, graphing, drag-and-drop, equation editor, and in-line choice items.

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

The "Learning Snapshot" included in each lesson provides TEKS-aligned tasks and questions utilizing a variety of question types. For example, in Lesson 4: "Transformations," the snapshot includes multiple choice, multi-select, and graphing item types. The "Learning Snapshots" are available in print and digital formats.

The Class Activities, located within the Instructional Resources, provide a variety of printable classroom activities that include matching, Venn diagrams, orderings, open response, and multiple choice activities

designed to challenge students in diverse ways. For example, the 30–60–90 Triangles activity challenges students to apply properties of triangles to find missing side lengths aligned to G.9B through open response and error analysis.

The Assessment/Assignment Center provides a wide variety of TEKS-aligned items that can be used for formative assessments. The digital items provide a variety of DOK levels and item types, including drag and drop, graphing, match tables, math text entry, and multiple choice.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	3/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	All criteria for guidance met.	2/2
2.2e	This guidance is not applicable to the program.	N/A
—	TOTAL	8/8

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

Each lesson's "Learning Snapshots" are accompanied by an answer key that includes item rationales for each item in the assessment to help interpret student performance. Multiple choice items include a rationale for the correct answer and each incorrect option. Other item types include a rationale for the correct response and possible misconceptions. For example, question 1 from Lesson 13 involves calculating the total cost of producing a cone-shaped candle, and the rationale for the incorrect choice A states, "The student likely forgot to add the fixed \$1.50 cost".

Progress Learning Geometry offers scoring information for assessments with correct answers and point values for every item in its item bank.

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

The Assessment/Assignment Center provides Quick-Click Remediation, which provides actionable data to respond to weak areas for individual students. The Help Center provides guidance on how to utilize the feature to respond to student performance trends and assign remediation activities to students based on performance.

Each lesson includes additional activities for intervention and extension opportunities based on students' trends following the lesson. Guidance is provided to "organize students into small groups based on their needs to complete the appropriate set of activities."

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

The *Progress Learning* Teacher Dashboard provides a Results Report to monitor student performance on assignments and assessments, including tabs for student dot rank, completion status, item analysis, assignment mastery, and student attempts.

The Student Activities, located within the Instructional Resources, provide customizable Student Tracker Templates and 6–12 Student Data Goal Sheets to aid students in tracking their own progress and growth.

The *Progress Learning* Student Dashboard provides students with access to the "Graded Work" tab to "see what standards they need to work on, which questions they missed on the assignment, and video explanations to help them understand why they got the answer wrong." Students can also pull progress reports from the "Study Plan" tab to monitor their overall performance on each standard.

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.

The lesson plan located within the Instructional Resources, for each of the 15 topics includes a "Teacher Guide" that provides prompts to assess student understanding throughout the Explore section. For example, Lesson 7 provides questions to ask students, such as, "How do we express the rise and run between the two points?"

Each lesson provides guidance on how to facilitate checks for understanding throughout the lesson. For example, guidance might suggest using Think-Pair-Share to have the students discuss the questions.

2.2e – If designed to be adaptive, materials provide 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 adaptive.

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	The materials do not provide explicit educator guidance for preteaching vocabulary and unfamiliar references in texts.	2/4
3.1c	All criteria for guidance met.	2/2
3.1d	The materials do not provide content and language supports to support individual students.	2/3
3.1e	All criteria for guidance met.	2/2
—	TOTAL	9/12

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.

In *Progress Learning Geometry*, each lesson includes resources with video explanations and problem sets to support struggling learners. For example, three video supports are provided in Lesson 7: "Segments" from grade 8, Algebra 1, and Geometry, all related to current content. While the "Implementation Guide," located within the Instructional Resources, provides guidance that states, "Teachers may organize students into small groups based on their needs to complete the appropriate set of problems."

The Instructional Resources include Math Sentence Stems with guidance to "use these sentence stems to scaffold with your tiered learners and support their writing and language development." The sentence stems can be incorporated throughout the lessons when students are working collaboratively and justifying their solutions.

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.

Each *Progress Learning Geometry* lesson provides explicit embedded guidance on various cooperative learning structures to support developing academic vocabulary by providing opportunities for students to talk with partners and groups using academic language and vocabulary. The strategies include Think-Pair-Share and Discuss & Do, where partners talk about the problem, solve it individually, and compare answers using academic language.

Each "Teacher Explore Slideshow" provides embedded visual support for unfamiliar references in the text. For example, when Lesson 13: "Volume" tasks students with calculating the volume of a clock tower, a visual is included.

The materials do not provide explicit educator guidance for preteaching academic vocabulary or unfamiliar references in the text.

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.

In *Progress Learning Geometry*, each lesson includes resources with video explanations and problem sets to support advanced learners. For example, two video supports are provided in Lesson 7: "Segments" from geometry and pre-calculus, all related to current content. While the "Implementation Guide," located within the Instructional Resources, provides guidance that states, "Teachers may organize students into small groups based on their needs to complete the appropriate set of problems."

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.

Within the Student Settings on the Teacher Dashboard, teachers have access to toggle the text-to-speech setting on or off for individual students.

Within the Assessment/Assignment Builder settings, "teachers can allow students to have access to a Desmos online calculator." Teachers can enable specific calculators (basic 4-function, scientific, or graphing) for individual students when assigning an activity or assessment.

The materials do not provide content and language supports. While the Assessment/Assignment Center does allow the language to be changed, specific supports such as pop-ups that simplify or clarify language, are not provided.

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.

Each *Progress Learning Geometry* lesson plan provides educator guidance on offering options and supports for students to demonstrate understanding in a variety of ways through cooperative learning structures. For example, Lesson 7: "Segments" provides opportunities for students to use Think-Pair-Share, Discuss & Do, and Rally Coach and Player to demonstrate understanding. Teacher guidance is provided on the implementation of each learning structure.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
3.2d	The materials do not provide guidance to support effective implementation for enrichment and extension methods.	1/2
3.2e	All criteria for guidance met.	2/2
—	TOTAL	13/14

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.

Each lesson includes an "Engage" phase designed to activate prior knowledge before introducing new information. For example, in Lesson 7: "Segments," students begin with a grade 8 real-world problem, finding the distance between two places located on a coordinate graph to activate prior knowledge of the Pythagorean Theorem.

Each lesson includes a "Teacher Guide" that provides guiding questions to anchor big ideas throughout the Explore phase. For example, in Lesson 13: "Volume," important concepts, such as "What geometric shape is the problem referring to?" and "Are we adding or subtracting to find the composite volume?" are anchored throughout the lesson.

Lesson 3: "Areas of Polygons and Composite Figures" provides guidance to "encourage students to draw their own diagrams," encouraging multiple means of representation of the two-dimensional figures used to create the composite figure. Prompts are also provided to highlight key patterns, features, and relationships, such as "Do we add or subtract areas?", "What properties of inscribed circles will help us here?", and "What units of measure are used for the answers?"

Each lesson includes a "Teacher Guide" with implementation guidance for the use of different strategies, such as Think-Pair-Share, Rally Coach & Player, and Round Robin, accompanied by prompts to highlight and connect key patterns, features, and relationships. For example, Lesson 10: "Circles" includes prompts, such as "What is the relationship between the radius and the arc length?", "Will we use arc length or sector area here?" or "What do you notice about the arc/angles in the diagram?"

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

Each lesson follows the 5E instructional approach with specific prompts and educator guidance for effective lesson delivery and facilitation of grade-level standards. For example, the "Teacher Guide" for Lesson 15: "Probability" provides specific implementation guidance for the use of various instructional approaches, such as Think-Pair-Share, Discuss & Do, and Rally Coach & Player.

Each lesson provides a breakdown of what is to be presented in each section of the lesson with a suggested timeframe for effective lesson delivery. For example, the "Engage" phase of Lesson 7: "Segments" suggests spending approximately five minutes with guidance to use Think-Pair-Share, activate prior knowledge, and clarify questions as a whole class.

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

Each lesson provides multi-tier intervention methods for various types of practice with teacher guidance to support effective implementation. For example, the Explore phase promotes collaborative practice opportunities, the "Explain" phase is designed to support teacher-led guided practice, while the "Evaluate" phase supports independent practice.

In *Progress Learning Geometry*, teachers are presented with multiple options for the structure of the "Explain," "Elaborate," and "Evaluate" phases of each lesson, with guidance on implementation. For example, the "Explain" phase provides two structures to cover the content. Option 1 states, "Show the videos to the whole class. Have students use Think/Pair/Share to answer the questions. Review questions as a whole class." While option 2 states, "Assign videos to the students. Students will view videos individually in the platform. Students will answer questions individually in the platform."

In *Progress Learning Geometry*, guidance is provided to support the effective implementation of various types of practice and structures. For example, in Lesson 11: "Geometric Mean and Trig Ratios," teachers are guided to "assign students to cooperative pairs (partners) for various activities throughout this lesson. For broader cooperation, assign students to two different cooperative pairs, such as a face partner and a shoulder partner, and vary which partner a student works with throughout the lesson."

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

Enrichment and extension activities are presented in the "Additional Activities for Intervention and Enrichment" section of the lesson. For example, in Lesson 7: "Segments," two additional activities are provided for "advanced learners": a precalculus video on vectors and a geometry video on distance in three dimensions. Each video is accompanied by two to three questions to check for understanding;

however, the lesson plan does not include educator guidance in the effective implementation of the activities.

The Assessment/Assignment Center provides educators with the opportunity to assign specific skills with varying levels of Depth of Knowledge (DOK) for individual students, providing enrichment and extension options through interactive online item types; however, guidance to support educators in selecting appropriate item types is not provided.

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

Each lesson provides guidance to support educators in providing timely feedback through explicit guidance to check for understanding at specific points within the lesson. For example, in Lesson 1: "Equations of Parallel & Perpendicular Lines," guidance is provided in the "Engage" and "Explain" sections to "review questions as a whole class" to clarify any misconceptions and provide timely feedback.

Prompts and guidance are given to support educators to provide timely feedback during the lesson. For example, in the "Teacher Guide" for Lesson 9: "Similarity," teachers are given the prompts: "Questions to ask students: i. Besides what is marked, are there other parts we know are congruent? ii. Do we have enough now to say they are similar? iii. What are the corresponding sides/angles?" Guidance is also provided that states, "Some may need a reminder about vertical angles."

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	All criteria for guidance met.	4/4
3.3b	This guidance is not applicable to the program.	N/A
3.3c	All criteria for guidance met.	1/1
3.3d	The materials do not provide embedded guidance to support building background knowledge and making cross-linguistic connections through written discourse.	6/8
3.3e	This guidance is not applicable to the program.	N/A
—	TOTAL	11/13

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.

The Instructional Resources include "Cooperative Learning Strategy Guide with Embedded Support of ELLs," which outlines each learning strategy incorporated throughout the lesson plans. The descriptions include grouping suggestions and "linguistic accommodations for the five ELL proficiency levels as defined in the English Language Proficiency Standards (ELPS)." For example, when implementing Discuss & Do, guidance suggests providing beginning students with a completed narrated example to verbalize the steps in solving the problem.

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.

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

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

Each lesson incorporates the ELPS to support educators in effectively using the materials in state-approved bilingual/ESL programs.

Each lesson provides implementation guidance through various cooperative learning strategies to support educators in effectively using the materials in state-approved bilingual/ESL programs. The "Scope and Sequence" states, "Cooperative learning significantly supports English Language Learners with second language acquisition by fostering peer interaction, providing opportunities for general and academic language practice, and creating a supportive environment where English Language Learners can think and feel comfortable expressing themselves in an academic environment."

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.

The "Geometry Scope and Sequence," located within the Instructional Resources, addresses how specific language objectives are supported in each lesson through embedded cooperative learning strategies to support oral discourse. The guidance states, "Cooperative learning significantly supports English Language Learners with second language acquisition by fostering peer interaction, providing opportunities for general and academic language practice, and creating a supportive environment where English Language Learners can feel comfortable expressing themselves in an academic environment."

Progress Learning Geometry includes guidance to support emergent bilingual (EB) students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral discourse. At the beginning of each lesson, content and language standards are enumerated, and then a list of "new to grade level" and "previously taught" vocabulary is listed. For example, in Lesson 8: "Proofs of Angles, Triangles, Quadrilaterals," the vocabulary is listed, then the "Engage" portion of the lesson plan asks teachers to "activate prior knowledge of: triangle sum, vertical angles, and parallel lines and transversals" through a Think-Pair-Share activity. Sentence stems are given to help students complete the proof statements.

Within Lesson 8: "Proofs of Angles," on the "Student Activity" page, students write their answers to the given proof statements, given the sentence frames. As students discuss and write their answers using a combination of high-frequency words and content-area vocabulary, they develop academic vocabulary and increase comprehension.

The materials do not provide embedded guidance to support building background knowledge and making cross-linguistic connections through written discourse.

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.

Each lesson follows a 5-E model with varying levels of difficulty where "the Engage, Explain, Elaborate, and Evaluate sections connect teachers and students directly to the TEKS-aligned content available in Progress Learning's digital platform." The 5E approach allows students to make connections between concrete and abstract representations.

In Lesson 1: "Equations of Parallel & Perpendicular Lines," students are asked to find equations of parallel or perpendicular lines aligned to G2C. Throughout the lesson, students are given the equation of a line and a point. They are asked to find the equation of the line parallel to the given line through the given point, as well as the line perpendicular to the given line through the given point.

In the Assessment Center, educators can create assessments that align to the depth of understanding required by TEKS through a variety of DOK levels and question formats.

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.

Each lesson follows the 5E model, designed to increase in rigor throughout the lesson cycle to reach grade-level proficiency. For example, Lesson 2: "3D Objects and Dimensional Changes," tasks begin with "A plane intersects a cylinder through the lateral surface. Explain the different shapes that can be created" and progress to more thought-provoking questions, such as "How can you intersect a cone with a plane to make a triangle?"

Each lesson provides additional activities for intervention and enrichment with direct links to videos and questions. The guidance states, "the intervention videos may come from below grade-level or on grade-level Progress Learning digital products, while the enrichment videos are often drawn from above grade-level resources."

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
—	TOTAL	6/6

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

The "Geometry Scope and Sequence," located within the Instructional Resources, provides a lesson sequence rationale that connects concepts horizontally through the 15 lessons. For example, Lesson 4: "Transformations" guidance states, "this foundational work prepares students to explore how rigid transformations are used to create and verify congruent figures in future lessons."

Lessons are sequenced in such a way that students can build on prior knowledge. For example, in Lesson 6: "Congruent Figures and Triangle Theorems," teachers are asked in the "Engage" section of the lesson to "Activate prior knowledge of: Triangle Sum and Exterior Angle Measures."

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grades 3–12, by connecting patterns, big ideas, and relationships.

Each *Progress Learning Geometry* lesson includes a "Vertical Alignment" section "intended to provide educators with an understanding of what students were previously taught and what students will learn in the years to come." The lesson plan clearly indicates prior and future knowledge standards related to the lesson. For example, in Lesson 3: "Area of Polygons and Composite Figures," the "Looking Back" section identifies TEKS 5.4H, 6.8B, 7.9B, 7.9C as previously learned skills, and the "Looking Forward" section identifies concepts from Statistics, SAT Math, and Calculus that the lesson will connect to in the future.

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.

The "Engage" phase of each lesson provides "one or more question IDs vertically aligned to the lesson's standards from prior grade levels." The question IDs, which are direct links to items in the assessment center, help students activate prior knowledge of concepts and procedures and make connections with the new material.

Progress Learning Geometry lessons connect students' prior knowledge of concepts to the specific lesson, as well as to future learning. For example, in Lesson 11: "Geometric Mean and Trig Ratios," the concept of inverse functions is introduced to help reinforce the idea that when finding an angle in a triangle, the inverse trigonometric function should be used, whereas trigonometric functions are used when solving for side length. This reasoning reinforces the idea of input and output of functions being reversed for inverse functions, which will be studied more in depth in future courses.

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 "Engage" phase of each lesson provides an opportunity to activate prior learning of concepts directly related to the current topic. Students use a variety of instructional methods to review prior knowledge, such as Think-Pair-Share. Practicing these previously learned skills allows for spaced retrieval opportunities to help support and integrate new concepts.

Progress Learning Geometry lessons build on prior skills and concepts, providing spaced retrieval opportunities. For example, Lesson 12: "Special Right Triangles" requires students to revisit the concept of the Pythagorean Theorem covered in prior lessons when exploring the pattern between the side lengths of 30–60–90 and 45–45–90 triangles.

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

Each lesson's "Learning Snapshots" provides a formative assessment where items provide interleaved practice opportunities with previously learned, and current skills. For example, in Lesson 9: "Similarity," the concepts of transformations from Lesson 4 are revisited when completing statements about similarity.

Within the Assessment/Assignment Center, custom assignments can be made for classes and/or individual students that address previously learned concepts. The assignments can be used for interleaved practice opportunities to target weak areas and reinforce new concepts.

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 mathematical concepts and complex, real-world situations.

Progress Learning Geometry provides questions and tasks throughout the Explore phase for students to interpret, analyze, and evaluate mathematical concepts. For example, students are asked to determine validity, write counterexamples, create biconditional statements, and analyze the differences between Euclidean and Spherical Geometry in Lesson 5: "Logical Arguments & Geometric Terminology."

In *Progress Learning Geometry*, practice questions provide opportunities for students to interpret, analyze, and evaluate mathematics concepts and real-world applications. For example, in Lesson 14, students are asked to solve various real-world problems calculating surface area, such as building a box for a home gym or covering a tent with fabric. The students must interpret and analyze the situations to determine what type of surface area (lateral or composite area), and then students are given additional practice in the "Learning Snapshot," where they can further interpret, analyze, and evaluate surface area problems in real-world and mathematics contexts.

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

The "Teacher Guide" in each lesson plan includes guidance that encourages the use of concrete models to develop understanding of mathematical situations. For example, Lesson 2 suggests using a block of cheese or a soft apple to visualize cross sections of 3D shapes, and Lesson 4 encourages the use of manipulatives to demonstrate reflective and rotational symmetries.

In *Progress Learning Geometry*, questions and tasks ask students to create representations of mathematical situations. For example, in Lesson 12: "Special Right Triangles," teachers are encouraged to ask students, "How do we label the picture provided? Or how do we sketch a picture?", encouraging students to visualize the problem through a mathematical lens.

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

In *Progress Learning Geometry* students are regularly asked to complete proofs. Students must apply the concepts learned in the course to justify their argument for each proof. For example, in Lesson 9: "Similarity," students have to use their prior knowledge of corresponding angles and the subtraction property of equality with the new knowledge of Angle-Angle Similarity to complete the two-column proof.

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.

In *Progress Learning Geometry*, teachers can assign students multiple practice problems in the online dashboard that provide immediate feedback to students to be able to develop automaticity and fluency as they practice, or students can work on their Study Plan. Within the dashboard, "Students can view each question on the assignment and either read a text explanation or watch an alien explanation video to learn from their mistakes and get feedback on each question."

The online dashboard provides additional practice opportunities for students within their graded work to build automaticity and fluency. "Students can click on the caret under each standard to find additional practice that the platform has suggested based on their performance".

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

In *Progress Learning Geometry*, students practice efficient and flexible mathematical procedures. For example, in Lesson 3: "Areas of Polygons and Composite Figures," students are shown how to find the area of a regular hexagon by finding the composite area of six congruent equilateral triangles, and then are introduced to the area of a regular polygon formula as a way to provide a more efficient way of solving the problem. Flexibility in the approach to solving problems using the polygon formula or composite areas is encouraged throughout the lesson and noted with the question: "Is there more than one way to find the area?"

In *Progress Learning Geometry*, students practice the application of accurate mathematical procedures by justifying their work. For example, in Lesson 9: "Similarity," guiding questions are provided that require students to check for accuracy, such as "Do we have enough information to say they are similar?" and "How can you verify that your answer is correct?"

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

In *Progress Learning Geometry*, students have opportunities to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy. For example, in Lesson 3: "Areas of Polygons and Composite Figures," students are shown how to find the area of a regular hexagon by finding the composite area of six congruent equilateral triangles, and then are introduced to the area of a regular polygon formula as a way to provide a more efficient way of solving the problem. The hexagon is redrawn as the six triangles to represent the different formulas. The representations demonstrate the flexibility in the approach and the accuracy between the two methods.

In *Progress Learning Geometry*, students have opportunities to evaluate mathematical representations, models, strategies, and solutions for efficiency. For example, in Lesson 12: "Special Right Triangles," students are encouraged to "look for shortcuts instead of using the Pythagorean Theorem where possible." Students evaluate models to determine if a special right triangle property would be more efficient than the Pythagorean theorem.

In *Progress Learning Geometry*, students have opportunities to evaluate mathematical representations, models, strategies, and solutions for accuracy. For example, IQ Showdown is a cooperative learning strategy used throughout the material for students to evaluate a concept for the worst answer, trickiest answer, and the correct answer while justifying their choices.

5.2d – Materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems.

Each lesson includes a "Teacher Guide" that provides guidance to support students in selecting the most efficient approach. For example, in Lesson 12: "Special Right Triangles," the guidance states, "Look for shortcuts instead of using the Pythagorean Theorem where possible." The accompanying Explore slideshow demonstrates the most efficient method to encourage students to utilize shortcuts when possible.

The "Teacher Guide" for each lesson highlights when multiple approaches to solving a problem are possible and provides prompts to discuss each method. For example, Lesson 7: "Segments" utilizes Think-Pair-Share to verify which midpoint is correct and states students "may use the visual cues from the graph or use the midpoint formula." Guidance includes questions such as "Did you use the graph or the formula?" to prompt discussion on the most efficient approach.

The "Implementation Guide" within the Instructional Resources provides a variety of Cooperative Learning Strategies that are incorporated into each lesson to encourage communication among students about their approaches to solving mathematics problems. Strategies such as Think-Pair-Share and

Discuss & Do allow students to work independently and share their problem-solving process with another student.

5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	All criteria for guidance met.	2/2
5.3b	All criteria for guidance met.	3/3
5.3c	The materials do not include support for connecting, creating, defining, and explaining concrete models to abstract concepts.	3/6
—	TOTAL	8/11

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

The "Geometry Scope & Sequence" within the Instructional Resources includes a rationale for each lesson that addresses how the conceptual and procedural emphasis of the TEKS are addressed. For example, in Lesson 2, students "analyze how scaling impacts perimeter, area, surface area, and volume, developing an understanding of proportional relationships in geometric contexts."

Each lesson in *Progress Learning Geometry* provides an objective that addresses the TEKS' conceptual and procedural emphasis. For example, Lesson 8: "Proofs of Angles, Triangles, & Quadrilaterals" states, "The student will prove and use theorems related to angles, triangles, and quadrilaterals to solve problems." The "Teacher Guide" includes prompts to facilitate conceptual and procedural emphasis, such as "What postulates, theorems, and definitions apply to this problem?" and "What method must be used to solve the problem?"

Each lesson in *Progress Learning Geometry* addresses the conceptual and procedural elements of the TEKS. For example, in Lesson 4: "Transformations," students are asked to "draw the triangle that results from transforming triangle ABC according to the rule . . . describe the transformation." The conceptual aspects of the standard, having to describe the transformation as a reflection and translation, are addressed, as well as the procedural skills of graphing the transformation and simplifying the algebraic steps to find each image's coordinates using the transformation rule.

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

Progress Learning Geometry incorporates opportunities for students to use concrete models and pictorial representations. For example, in Lesson 2: "3D Objects and Dimensional Changes," when discussing what shape the cross-section of different 3D figures would make, it is suggested that the teacher "consider using something like cheese to cut cross-sections as a hands-on model," while pictorial models are given in the Explore slideshow.

Progress Learning Geometry allows students to use pictorial representations and abstract models. For example, in Lesson 4: "Transformations," students use pictorial models to visualize transformations in the coordinate plane and develop the abstract coordinate rules that describe the given transformation.

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.

Progress Learning Geometry supports connecting, creating, and explaining the relationship between representational and abstract models. For example, in Lesson 4: "Transformations," the representational model of a transformation on the Cartesian graph is connected to the abstract coordinate rule for the transformation. Students create models through graphs and write the abstract rule. For example, slide two states, "Triangle ABC is dilated by a factor of 2 and centered about the point (1, -2) to create triangle A'B'C'. What is the coordinate rule to describe this transformation?" Lastly, students have opportunities to explain the representation and rule using everyday language on slide 6 with: "Describe the sequence of transformations that will carry triangle RST onto triangle R'S'T'?"

Progress Learning Geometry provides guidance for creating and connecting pictorial and abstract representations. For example, the "Implementation Guide" for Lesson 10: "Circles" states, "Have students fill in the angles and arcs in the diagram before answering the questions," which helps build connections. Prompts are included to help explain the representational models to abstract concepts, such as, "What do you notice about the arc/angles in the diagram?"

The materials do not provide support in connecting, creating, defining, and explaining concrete models to abstract concepts.

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.

Progress Learning Geometry provides students with opportunities to develop academic language using visuals. For example, in the "Teacher Explore Slideshow" for Lesson 3: "Area of Polygons and Composite Figures," students are given the definition of an *apothem*, which is connected to the height or altitude of an inscribed triangle. The materials include a visual of the inscribed triangle's altitude being the same as the hexagon's apothem.

Progress Learning Geometry allows students to develop academic language using sentence stems. For example, in the "Teacher Explore Slideshow" for Lesson 8: "Proofs of Lines, Triangles, and Quadrilaterals," students are provided problems that require filling in the blank with the correct mathematical term (sentence stems) while working with a partner using cooperative learning strategies such as Rally Coach and Player and Discuss & Do to facilitate conversations.

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.

Each lesson includes embedded teacher guidance to scaffold and support students' use of academic vocabulary when communicating with peers. The explain phase of each lesson includes sentence stems to support vocabulary development. For example, Lesson 9: "Similarity" states, "Have students complete the following sentence stems to support the development of academic vocabulary: In my own words, I would explain the Triangle Proportionality Theorem as . . ."

The "Implementation Guide" within the Instructional Resources provides strategies to scaffold, support, and extend academic vocabulary. Guidance includes examples of vocabulary scavenger hunts and implementing structured routines for peer math talks.

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

Progress Learning Geometry embeds guidance to support student application of appropriate mathematical language and vocabulary in discourse. For example, in Lesson 5: "Logical Arguments & Geometric Terminology," during the Explore portion of the lesson, in the "Teacher Explore Slideshow," students are asked to identify examples of key academic terms. Then, later in the lesson, teachers are guided to "remind students to keep key descriptive words in the right place of converse, inverse, and contrapositive for clarity."

Progress Learning Geometry embeds guidance to support student application of appropriate mathematical language and vocabulary in discourse through structured conversations. In Lesson 8: "Proofs of Lines, Triangles, and Quadrilaterals," the materials guide the teacher in facilitating the Rally Coach and Player activity/handout, where students work in pairs to prove that two angles are supplementary using sentence frames.

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

Progress Learning Geometry embeds guidance to facilitate mathematical conversations, allowing students to hear, refine, and use math language with peers. For example, in Lesson 3: "Area of Polygons and Composite Figures," during the Explore portion of the lesson, in the "Teacher Explore Slideshow," the students participate in activities such as Discuss & Do, where partners talk about the problem, solve it individually, and compare answers using academic language. Students also engage in two Think-Pair-Share sessions during the Explore portion of the lesson. There are teacher-guiding questions in the lesson plan to help guide student conversations.

Each lesson includes an "Explain" phase that includes videos to allow students to hear math language with their peers. After the videos, the teacher is prompted to facilitate a Think-Pair-Share, and then to review questions in the whole group.

Progress Learning Geometry includes embedded support to facilitate mathematical conversations through cooperative learning strategies. For example, in Lesson 5: "Logical Arguments & Geometric Terminology," the materials guide the teacher in facilitating the Rally Coach and Player activity/handout, where students work in pairs. The activity requires partner A to write a biconditional statement, while partner B (the coach) encourages partner A by giving hints, clues, and redirection as needed, allowing opportunities to refine and use mathematical language.

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.

Each lesson includes a "Learning Snapshot Rationale" with guidance to anticipate student responses, including exemplar responses. For example, question 4 in Lesson 10: "Circles," "Learning snapshot" includes embedded guidance for possible errors, such as, "A possible error is using the circumference of the circle instead of the area." This support gives teachers insight into why a student may have chosen an incorrect response to a question.

Each lesson's "Teacher Guide" includes guidance on possible misconceptions to support and redirect inaccurate student responses. For example, Lesson 14: "Surface Area" states, "Students often overlook the difference between lateral area and total surface area," and "Students misunderstand the questions that involve the lateral surface area plus the area of one base or other special circumstances."

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
—	TOTAL	4/4

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

Progress Learning Geometry appropriately integrates the mathematics process standards into the lessons. Each of the 15 lessons explicitly targets two to three process standards, with all process standards covered throughout the program. The Geometry "Scope and Sequence" document outlines which process standards each lesson addresses.

The TEKS process standards are integrated appropriately into the materials. For example, in Lesson 2: "3D Objects and Dimensional Changes," guidance for students to select tools, such as GeoGebra's 3D graphs or concrete objects, to help visualize the shapes of the cross sections aligns with G.1C.

The TEKS process standards are integrated appropriately into the materials. For example, in Lesson 9: "Similarity," the materials use structured discussion and multiple representations to help students communicate mathematical ideas to complete a proof. Guiding questions, such as "What conclusions can we draw from parallel lines?" support student communication.

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

In *Progress Learning Geometry*, the Explore phase demonstrates how the process standards are incorporated in each lesson. For example, within Lesson 3: "Areas of Polygons and Composite Figures," the specific process standards addressed by each section of the Explore activity are enumerated and clarified with the guiding questions to connect the content and process standards. Specifically, the guidance references process standard G.1E with the specific guidance: "Encourage students to draw their own diagrams."

In *Progress Learning Geometry*, the incorporated process standards connect to the content standards described within each lesson's Explore portion. For example, the content standard of G.11(A): "Apply the formula for the area of regular polygons to solve problems using appropriate units of measure" is connected to the process standard G.1B: "Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution" through the suggested teacher questioning: "What formula do we need?", "Is there more than one way to find the area?", and "What unit of measure is used for the answer?"

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

The "Geometry Scope & Sequence" within the Instructional Resources provides a table detailing which process standards are incorporated into each lesson. For example, Lesson 4: "Transformations" incorporates G.1C, G.1D, and G.1G.

The "Geometry Scope & Sequence" within the Instructional Resources provides an overview of each lesson. For example, Lesson 3: "Area of Polygons and Composite Figures" states that the lesson "supports problem solving in both mathematical and real-world contexts," as defined in G.1A.

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
—	TOTAL	9/9

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

Progress Learning Geometry allows students to think mathematically, persevere through solving problems, and make sense of mathematics. For example, in Lesson 8: "Proofs of Lines, Triangles, and Quadrilaterals," students collaboratively work through a multi-step problem to determine the value of x and the missing angle measures. Students must think mathematically and apply previously learned angle concepts. Throughout the Discuss & Do activity, teachers are given questions to ask students: "i. What can we mark from the problem?; ii. What can we conclude from the diagram?; iii. How do we write an equation?; iv. Did you answer everything asked for in the problem?" helping students to persevere through the multistep problem and make sense of the mathematics.

Each lesson follows a 5E model with opportunities for students to think mathematically, persevere through solving problems, and make sense of mathematics. During the Explore and "Explain" phase, students work collaboratively through an interactive learning experience to think mathematically and persevere through the material. The "Elaborate" phase "focuses on giving students space to apply what they've learned and helps them to develop a deeper understanding," and make sense of the mathematics.

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

In *Progress Learning Geometry*, the teacher guide supports students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. For example, in Lesson 7: "Segments," students are given a triangle on the coordinate plane and must verify the correct midpoint of the two provided ordered pairs. The teacher's guidance states, "They may use the visual cues from the graph or use the midpoint formula." Guidance also includes prompts such as "Who is correct? How do you know? Did you use the graph or the formula?" to highlight the multiple ways to solve the problem.

Progress Learning Geometry supports students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. For example, in Lesson 12: "Special Right Triangles," students solve triangles that are Pythagorean triples, and after showing the solution using that method, the slideshow states, "if you did not realize this was a Pythagorean triple, then apply the Pythagorean Theorem" or with a 45–45–90 triangle, "(the) Pythagorean Theorem works here, too." These prompts support students in understanding that there are multiple ways to solve problems, while the teacher prompts, such as "What other method could be used to solve this problem?" help guide students in explaining the multiple approaches.

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.

The Explore phase of each lesson is designed for students to engage in collaborative activities while doing, writing, and discussing math. For example, in Lesson 11: "Geometric Mean and Trig Ratios," students are given a handout that asks them to answer the question with a partner: "Which expression can be used to solve for the length of XY?" and are asked to discuss and write their answers to the following prompts over three rounds: "Round 1: Indicate with your fingers (one to four) which answer you think is the worst and why; Round 2: Indicate which answer is the 'trickiest' answer and why; Round 3: Indicate which answer is the correct answer and support your answer."

Each lesson incorporates a variety of cooperative and interactive learning strategies that require students to make sense of the mathematics through discussions such as Think-Pair-Share, Discuss & Do, and Rally Coach & Player. For example, in Lesson 2: "3D Objects and Dimensional Changes," a Rally Coach & Player activity is included where students work with a partner to write down their explanations of how different shapes are formed by intersecting 3D figures with a plane.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	8/8
6.2b	All criteria for guidance met.	4/4
—	TOTAL	12/12

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

Progress Learning Geometry supports educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. For example, in Lesson 5: "Logical Arguments & Geometric Terminology," the explore slideshow begins with reviewing key terms, then moves into a Think-Pair-Share activity that asks students to determine the validity of four statements. While completing the activity, students explain and justify their thinking with the guiding questions: "How do we determine validity?" and "What counterexample proves this false?" Throughout the lesson, students can share their arguments for the validity of given statements and provide counterexamples when appropriate. For example, during the Rally Coach & Player activity, students are asked: "Garret makes a conjecture that all quadrilaterals with one pair of parallel sides are rectangles. Is the conjecture correct? If not, provide a counterexample?"

In *Progress Learning Geometry*, supports educators in guiding students to share multiple points of entry while also encouraging students to reflect on which method is more effective, as exemplified in Lesson 12: "Special Right Triangles," with questions like: "What other method could be used to solve this problem?" and suggested teacher statements of: "Also, remind them to look for shortcuts instead of using the Pythagorean Theorem where possible."

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

Progress Learning Geometry includes prompts and guidance to support educators in providing explanatory feedback based on anticipated misconceptions. Each lesson plan has a section identifying common misconceptions and guiding questions throughout the Explore portion of the lesson that addresses these anticipated misconceptions. For example, in Lesson 13: "Volume," the common misconceptions are: "Students may have trouble identifying the base of a prism, especially where the rotation of the given diagram is involved; students may forget to use the radius when the diameter is given; students often forget to include cubic units in their answers; and students may tend to add to find composite volumes and may not realize that 'holes' should be subtracted," and then in the lesson, guiding questions throughout are: "What formula(s) are needed? Do we need to rotate the diagram to find the base? Are we adding or subtracting volumes? What shape is the base? What units are involved?"

The materials provide explanatory feedback through the assessment center based on students responses, including immediate video responses on the digital platform when students answer incorrectly and reattempt opportunities to reinforce learning.