Protocol for Review of Instructional Materials for ELLs V2

WIDA PRIME V2 CORRELATION
Introduction to PRIME

WIDA developed PRIME as a tool to assist publishers and educators in analyzing their materials for the presence of key components of the WIDA Standards Framework. PRIME stands for Protocol for Review of Instructional Materials for ELLs.

The PRIME correlation process identifies how the components of the 2012 Amplification of the English Language Development Standards, Kindergarten through Grade 12, and the Spanish Language Development (SLD) Standards, Kindergarten through Grade 12 are represented in instructional materials. These materials may include core and supplemental texts, websites and software (e.g., apps, computer programs), and other ancillary materials. PRIME is not an evaluative tool that judges the effectiveness of published materials.

Those who complete WIDA PRIME Correlator Trainings receive PRIME Correlator Certification. This may be renewed annually. Contact WCEPS for pricing details at store@wceps.org or 877-272-5593.

New in This Edition

PRIME has been expanded to include

- Correlation to the WIDA Standards Framework
- Connections to English and Spanish Language Development Standards
- Relevance for both U.S. domestic and international audiences

Primary Purposes

- To assist educators in making informed decisions about selecting instructional materials for language education programs
- To inform publishers and correlators on the various components of the WIDA Standards Framework and of their applicability to the development of instructional materials

Primary Audience

- Publishers and correlators responsible for ensuring their instructional materials address language development as defined by the WIDA English and Spanish Language Development Standards
- District administrators, instructional coaches, and teacher educators responsible for selecting instructional materials inclusive of or targeted to language learners

At WIDA, we have a unique perspective on how to conceptualize and use language development standards. We welcome the opportunity to work with both publishers and educators. We hope that in using this inventory, publishers and educators will gain a keener insight into the facets involved in the language development of language learners, both in the U.S. and internationally, as they pertain to products.
Overview of the PRIME Process

PRIME has two parts. In Part 1, you complete an inventory of the materials being reviewed, including information about the publisher, the materials’ intended purpose, and the intended audience.

In Part 2, you answer a series of yes/no questions about the presence of the criteria in the materials. You also provide justification to support your “yes” responses. If additional explanations for “No” answers are relevant to readers’ understanding of the materials, you may also include that in your justification. Part 2 is divided into four steps which correspond to each of the four elements being inventoried; see the following table.

PRIME at a Glance

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PRIME Part 1: Provide Information about Materials

Provide information about each title being correlated.

Publication Title(s): Reveal Math

Publisher: McGraw-Hill

Materials/Program to be Reviewed: Reveal Math Course 1, 2 & 3 (Middle School)

Tools of Instruction included in this review: Language Development Handbook, Teacher Edition and Student Edition

Intended Teacher Audiences: Middle School Level Math Teachers

Intended Student Audiences: Middle School Students (Grades 6, 7, & 8)

Language domains addressed in material: Listening, Speaking, Reading, and Writing

Check which set of standards will be used in this correlation:

☐ WIDA Spanish Language Development Standards

☒ WIDA English Language Proficiency Standards

WIDA Language Development Standards addressed: (e.g. Language of Mathematics). Social and Instructional Language, the Language of Mathematics

WIDA Language Proficiency Levels included: The WIDA language proficiency levels are not explicitly named as WIDA levels, but the materials do provide support, activities and descriptors for three sets of levels: Entering/Emerging, Developing/Expanding, and Bridging. These are the same names as WIDA levels 1-5.

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In the space below explain the focus or intended use of the materials: Academic research and the science of learning provide the foundation for this powerful K-12 math program designed to help reveal the mathematician in every student. Reveal Math used findings from research on teaching and learning mathematics to develop its instructional model. Based on analyses of research findings, these areas form the foundational structure of the program: rigor, productive struggle, formative assessment, rich tasks, mathematical discourse, and collaborative learning.
PRIME Part 2: Correlate Your Materials

1. Asset-Based Philosophy

A. Representation of Student Assets and Contributions
The WIDA Standards Framework is grounded in an asset-based view of students and the resources and experiences they bring to the classroom, which is the basis for WIDA’s Can Do Philosophy.

1) Are the student assets and contributions considered in the materials?  
   Yes  No

2) Are the student assets and contributions systematically considered throughout the materials?  
   Yes  No

Justification: Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) Students’ assets and contributions are considered in the materials. In the Language Development Handbook (LDH) for each grade level, the Guiding Principles for Supporting English Learners explain their philosophy about supporting English Learners. One asset-based statement within this description on page vi of the LDH says, “A great many ELLs come to school with a variety of rich linguistic and cultural backgrounds from Spanish-speaking communities and countries all throughout the Americas...The experiences and identities acquired in the context of ELLs’ homes and communities can transform the simplest classroom into a unique cultural and linguistic microcosm.” Additionally, despite this being a math program, there are opportunities for student reflection, as evidenced here on page 10 of the Course 3 Student Edition, Volume 1:
Students’ assets and contributions are systematically considered throughout the materials. An asset-based philosophy is stated in the Guiding Principles for Supporting English Learners mentioned above but is also considered through the scaffolds and supporting activities which occur in each lesson. Throughout the lessons, there are “Explore” activities, where students have opportunities to work with partners or in small groups to “explore a rich, real-world or mathematical problem related to the lesson content” (page iv, Course 1 Teacher Edition Front Matter). There are also specific considerations outlined for working with English learners, including the idea that some English learners may need additional wait time before answering a question, or can answer the question in their native language. See this description from the LDH, page x:
These considerations can be found in each Language Development Handbook all three courses.

The LDH also contains “Multicultural Teacher Tips” throughout, to help teachers better understand the particular needs, strengths, and diversity that ELLs bring to the classroom. See example below, taken from page xiii of the LDH:

**Wait time/Different Response**

- Be sure to give students enough time to answer the question. They may need more time to process their ideas.
- Let them know that they can respond in different ways depending on their levels of proficiency. Students can:
  - Answer in their native language; then you can rephrase in English
  - Ask a more proficient ELL speaker to repeat the answer in English
  - Answer with nonverbal cues.

**Multicultural Teacher Tip**

These tips provide insight on academic and cultural differences you may encounter in your classroom. While math is the universal language, some ELLs may have been shown different methods to find the answer based on their native country, while cultural customs may influence learning styles and behavior in the classroom.

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2. **Academic Language**

WIDA believes that developing language entails much more than learning words. WIDA organizes academic language into three dimensions: discourse, sentence, and word/phrase dimensions situated in sociocultural contexts. Instructional material developers are encouraged
to think of how the design of the materials can reflect academic language as multi-dimensional.

A. Discourse Dimension (e.g., amount, structure, density, organization, cohesion, variety of speech/written text)

1) Do the materials address language features at the discourse dimension in a consistent manner for all identified proficiency levels?  Yes  No

2) Are the language features at the discourse dimension addressed systematically throughout the materials?  Yes  No

Justification: Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) The materials address language features at the discourse dimension in a consistent manner for all identified proficiency levels. The LDH provides a chart on collaborative conversations (page ix), because students engage in whole and small group and also partner discussions during each lesson. The chart, seen below, provides frames for these conversations:
The Teacher Edition also reminds teachers to encourage their students to pause and reflect in order for them to engage in further discussion either with a partner or as a whole group. This description is seen here, from page 1, Volume 1 of the Teacher Edition:

**Pause and Reflect**

Encourage your students to engage in the habit of reflection. As they progress through the module, they will be encouraged to pause and think about what they just learned. These moments of reflection are indicated by the Pause and Reflect questions that appear in the Interactive Student Edition. You may wish to have your students share their responses with a partner or use these questions to facilitate a whole-class discussion.
See also an example of the Pause and Reflect section from the Student Edition, Course 1, Volume 2, page 284:

**Pause and Reflect**

Describe an instance in which the order you write the terms in the expression matters. Why is this important to recognize?

2) Language features at the discourse dimension are systematically addressed throughout the materials. In the margins of the Student Editions are prompts entitled “Think About It!” and “Talk About It!” which the students can use to discuss what they’ve just learned. An example can be seen below, taken from page 50 of the Student Edition, Course 3, Volume 1:
The Teacher Edition provides example sample responses for these questions.

B. Sentence Dimension (e.g., types, variety of grammatical structures, formulaic and idiomatic expressions; conventions)

1) Do the materials address language features at the sentence dimension for all of the identified proficiency levels?  
   Yes  No

2) Are the language features at the sentence dimension appropriate for the identified proficiency levels?  
   Yes  No
3) **Are the language features at the sentence dimension addressed systematically throughout the materials?**

**Yes**  

**No**

*Justification: Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.*

1) The materials address the language features at the sentence dimension for all identified proficiency levels. Each lesson contains a chart, organized by the three identified proficiency levels (Entering/Emerging, Developing/Expanding, and Bridging) with leveled activities for the lesson topic. As seen in the example below, there are often sentence frames and other language structures, like asking for and giving information. This example comes from the LDH, Course 1, Module 6, Lesson 4, page T37:

![English Language Development Leveled Activities](image)

Additionally, students are provided with many types of graphic organizers, such as Cornell Notes, throughout the materials to help with understanding. According to the description, on page xvi of the LDH, Cornell Notes “provide students with a method to take notes, thereby helping them with language structure. Scaffolded sentence frames are provided for students
to fill in important math vocabulary by identifying the correct word or phrase according to context.” An example of this method is seen here, from page 10 of the LDH for Course 1, Module 2, page 13:

2) The sentence dimension language features are appropriate for the identified proficiency
levels. As mentioned above, the LDH contains leveled activities for each lesson, which contain appropriate sentence dimension features. In this example, the teachers are reminded to ask questions based on their students’ levels of English comprehension:

**Lesson 5 Solve Ratio Problems**

*English Learner Instructional Strategy*

**Language Structure Support: Tiered Questions**

As you work through the lesson, be sure to check ELL students’ understanding during every step. You can do this by asking questions that are appropriate to their level of English acquisition. Entering/Emerging students can point or say yes/no. Your instructions must be very short and clear with known vocabulary. Developing/Expanding students can give short answers and may attempt simple sentences. Bridging students can create longer sentences and synthesize more information in English.

Entering/Emerging students: Point to the correct ratio. Is this the correct ratio?

Developing/Expanding students: What is the correct ratio? Have students write it.

Bridging students: Explain the ratio of _____ to _____ The ratio of _____ to _____ is _____.

Have students write their answer as a complete sentence.

Add ratio to the Math Word Wall with a math example or picture.

**English Language Development Leveled Activities**

<table>
<thead>
<tr>
<th>Entering/Emerging</th>
<th>Developing/Expanding</th>
<th>Bridging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choral Responses</strong></td>
<td><strong>Listen and Identify</strong></td>
<td><strong>Pairwork</strong></td>
</tr>
<tr>
<td>Model an example of a simple ratio from the lesson. Or use your own, such as one eraser for every two pencils. Write 1:2 on the board. Point to the expression and say, This is a ratio. Prompt students to say, ratio. Repeat chorally and then individually. Make sure students pronounce ish (and not it) in the middle of the word. Repeat for other examples, including other ways of saying the ratio, such as one eraser for every two pencils. As students’ language ability allows, prompt and practice the sentence. This is/isn’t a ratio.</td>
<td>Give each student 10 pattern blocks: four squares, three trapezoids, one rectangle, and two hexagons. (Other items, such as paper clips and pencils may be used.) Then ask them to show and write the ratios of the sets as you call them. For example, say, Show me four squares to two trapezoids. Write the ratio. Ask students to find the ratio of hexagons to squares expressed in three different ways: as a fraction, using a colon, and in words. Say, Write the ratio as a fraction/with a colon/in words.</td>
<td>Have partners work together. Give each pair a write-on/wipe-off board and a board marker. One partner should say a ratio, and the other partner should show it using manipulatives or by drawing on their board. For example, the first student says, Show me a ratio of 3 pencils to 2 erasers. The second student should use pencils and erasers to show the ratio and then write 3:2, $\frac{3}{2}$, or 3 pencils for every 2 erasers. Have students switch roles and repeat.</td>
</tr>
</tbody>
</table>

**Teacher Notes:**

3) The features at the sentence dimension are present systematically throughout the
materials. Every lesson contains the aforementioned English Language Development Leveled Activities, which address the lesson content in an appropriate manner for each of the three identified proficiency levels. Oftentimes there are additional tips, and language support, as seen here in this example from Lesson 3 of the LDH, Course 1, Module 2, page T11, for supporting modeled talk:

Lesson 3  Relate Fractions, Decimals, and Percents

English Learner Instructional Strategy

Language Structure: Support Modeled Talk

Check students’ pronunciation of the decimals and fractions they are working with, particularly those ending in /ths/. The th sound can be very difficult for many ELLs. To illustrate the pronunciation of /th/, demonstrate proper tongue placement between your teeth. Then hold a piece of paper in front of your mouth as you blow out through your teeth, saying /thththth/. Have students practice. Then review the pronunciation of tenths, hundredths, and thousandths. Say each word in isolation, and have students repeat chorally at first and then individually.

Encourage students to use the following language when they need help or clarification during the lesson:
Entering/Emerging: Is this correct? I don’t understand.
Developing/Expanding: Is this the correct answer? I don’t understand how to solve this problem.
Bridging: Could you please help me with this problem? I understand ____ , but ____ does not make sense.

C. Word/Phrase Dimension (multiple meanings of words, general, specific, and technical language

1) Do the materials address language features at the

Yes  No
word/phrase dimension in a consistent manner for all identified proficiency levels?

2) Are words, expressions, and phrases represented in context? Yes No

3) Is the general, specific, and technical language appropriate for the targeted proficiency levels? Yes No

4) Is the general, specific, and technical\textsuperscript{2} language systematically presented throughout the materials? Yes No

\textbf{Justification:} Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) The materials address the language features of the word/phrase dimension in a consistent manner for all three identified proficiency levels. There is a relatively strong emphasis on vocabulary development throughout the series. For example, in the English Language Development Leveled Activities chart in the LDH, the Entering/Emerging level often targets academic vocabulary. There are also many accompanying graphic organizers to help with these new vocabulary words. An example of a vocabulary graphic organizer can be seen below, taken from Course 1, Module 3, Lesson 1:

\textsuperscript{2}General language refers to words or expressions not typically associated with a specific content areas (e.g., describe a book).
Specific language refers to words or expressions used across multiple academic content areas in school (chart, total, individual).
Technical language refers to the most precise words or expressions associated with topics within academic content areas in school and is reflective of age and developmental milestones.
Another example of a graphic organizer for vocabulary development gives the students opportunities to connect the vocabulary words to the same word in Spanish. These activities also give students the opportunity to recognize cognates that may be familiar to them:
2) Words, phrases and expressions are represented in context throughout the materials. All the vocabulary and phrases used within a lesson connect to the math content. Often, as in the example below from Course 1, Volume 2, Lesson 5-3, the students will identify the vocabulary they will learn in the lesson:
The students then proceed with the lesson and encounter the words in context:

Algebraic expressions can contain like terms, coefficients, variables, and constants. When addition or subtraction signs separate an algebraic expression into parts, each part is called a term.

\[ 4x + 12 + 2x \]

4x, 12, and 2x are terms.

Like terms contain the same variables to the same powers.

\[ 4x + 12 + 2x \]

4x and 2x are like terms.

The numerical factor of each term that contains a variable is called the coefficient of the variable.

\[ 4x + 12 + 2x \]

The coefficient of x is 4.
The coefficient of x is 2.

A term without a variable is called a constant.

\[ 4x + 12 + 2x \]

The number 12 is a constant.
The general, specific, and technical vocabulary are appropriate for the targeted proficiency levels. The LDH is designed for educators to be able to differentiate the language of math and provide support for students as they navigate the academic content. In the example below, from Course 3, Module 1, Lesson 4, the students are learning about zero and negative exponents. At the Entering/Emerging level, students are using a word recognition strategy by having index cards with basic vocabulary such as add, subtract and multiply on them. The students use these cards to work through the problems with the teacher. At the Developing/Expanding level, students will engage in a think-pair-share activity with sentence frames and oral practice using the more specific vocabulary of the subject area, such as equivalent. At the Bridging level, students will be reporting back about how they completed the task using a more sophisticated sentence frame:

<table>
<thead>
<tr>
<th>Entering/Emerging</th>
<th>Developing/Expanding</th>
<th>Bridging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word Recognition</strong></td>
<td><strong>Think-Pair-Share</strong></td>
<td><strong>Report Back</strong></td>
</tr>
<tr>
<td>Before the lesson, create a set of index cards with add, subtract, multiply, and divide written on them. Randomly distribute the cards so each student has one. As you work through problems from the lesson, have students guide you by prompting them with either/or questions for each step, such as Do I add or subtract these numbers? Or Do I multiply the exponents or add them? Have students with the correct cards hold them up, and then choose one of these students to come forward and complete that step with you.</td>
<td>Before the lesson, use index cards to create matching pairs of expressions with positive and negative exponents, such as $10^3 \cdot 10^{-6}$ and $\frac{1}{10}$ or $y^2 \cdot y^{-3}$ and $\frac{1}{y}$. Distribute one card to each student. Say, Find the student with a card showing an equivalent expression. Give students time to find their partners. Then say, Explain why the expressions are equivalent. Display the following sentence frame for students to use when sharing their explanations: _____ and _____ are equivalent because ___.</td>
<td>Assign a problem to each student. Say, Rewrite the problem using multiplication or division, and then simplify the expression. Give students time to complete the task. Then display the following sentence frames for students to use in reporting back on how they arrived at an answer. I rewrote _____ as ___. I [added/subtracted] the exponents. I simplified _____ to ___. Have students evaluate each others’ work and make suggestions when an incorrect answer is shared.</td>
</tr>
</tbody>
</table>

The general, specific, and technical language is systematically presented throughout the materials. At the beginning of each module, the students see a section called “What Vocabulary Will You Learn?” which provides a list of the vocabulary words presented in the module. In this example, from Course 1, Volume 2, Lesson 5-1, page 261, the students are presented with a list of vocabulary related to powers and exponents:
Following this are explicit definitions, accompanied by graphic support and activities to help them understand and apply the meaning of the vocabulary:
Additionally, the LDH outlines the myriad of supports available for students in each Student Edition regarding vocabulary that can be used before, during, or after classroom instruction. These supports include word cards, vocabulary squares, a three-column chart, definition maps, concept webs, and Cornell Notes. See examples of these below:

**Word Cards:**

**Vocabulary Squares:**
Cornell Notes:

Use Cornell notes to better understand the lesson’s concepts. Complete each sentence by filling in the blanks with the correct word or phrase.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do I add decimals?</td>
<td>To add decimals, line up the ____________, then, I add digits that have the same ____________</td>
</tr>
<tr>
<td>2. How do I subtract decimals?</td>
<td>To subtract decimals, line up the ____________, then, I subtract the digits that have the same ____________, or place zeros at the end of a decimal in order to subtract</td>
</tr>
<tr>
<td>3. When I multiply two decimals, where do I place the decimal point in the product?</td>
<td>Place the decimal point the same number of places from the (left/right) as the ________ of the number of decimal places in each factor</td>
</tr>
<tr>
<td>4. When I divide a decimal by a whole number, where do I place the decimal point in the quotient?</td>
<td>The decimal point in the quotient is placed directly (above/below) the decimal point in the ________</td>
</tr>
</tbody>
</table>

Summary

When do you need to annex zeros when computing with decimals?

Word Definition Map:

Use the definition map to list qualities about the vocabulary word or phrase.

Vocabulary: reciprocals

Characteristics

Examples

Concept Web:

Three Column Chart:
3. Performance Definitions

The WIDA Performance Definitions define the WIDA levels of language proficiency in terms of the three dimensions of academic language described above (discourse, sentence, word/phrase) and across six levels of language development.

A. Representation of Levels of Language Proficiency

1) Do the materials differentiate between the language proficiency levels? **Yes** **No**

2) Is differentiation of language proficiency developmentally and linguistically appropriate for the designated language levels? **Yes** **No**

3) Is differentiation of language systematically addressed throughout the materials? **Yes** **No**

*Justification: Provide examples from materials as evidence to support each “yes”*
Although not explicitly identified as WIDA proficiency levels, the materials do differentiate between language proficiency levels that are similar in name and description to WIDA’s levels. The Language Development Handbook (LDH) provides differentiated instructional support and guidance for teachers, beginning with an understanding of what skills students may have at each level:

- **An Entering/Emerging Level ELL**
  - New to this country; may have memorized some everyday phrases like, “Where is the bathroom”, “My name is...”, may also be in the “silent stage” where they listen to the language but are not comfortable speaking aloud
  - Struggles to understand simple conversations
  - Can follow simple classroom directions when overtly demonstrated by the instructor

- **A Developing/Expanding Level ELL**
  - Is dependent on prior knowledge, visual cues, topic familiarity, and pretaught math-related vocabulary
  - Solves word problems with significant support
  - May procedurally solve problems with a limited understanding of the math concept

- **A Bridging Level ELL**
  - May struggle with conditional structure of word problems
  - Participates in social conversations needing very little contextual support
  - Can mentor other ELLs in collaborative activities

The lessons contain leveled discussion questions, to use with students who are approaching level (AL), beyond level (BL) or are on level (OL). The lessons also provide resources to support any ELLs the teachers may have, as outlined in this example from the Course 1 Teacher Edition, page 3a:
2) The differentiation of language proficiency is developmentally and linguistically appropriate for the middle school target age of the materials. On page x of the LDH for each grade level, there is description of strategies for classroom discussion. This is a helpful resource for guiding teachers’ work with students of varying linguistic abilities. The section “Asking about Meaning” provides sentence frames to use at each of the three proficiency levels in order to encourage all students to participate in classroom discussions, thus building oral competency and confidence in all students:
3) Language differentiation occurs systematically throughout the materials. In the LDH, each lesson contains a section called “English Language Development Activities.” This chart, seen below, contains specific activities to support the lesson, divided up by proficiency level:
The 6-8 Reveal Math Program Overview also explains the tools and resources they provide for differentiated instruction, both digitally and in the LDH, Student and Teacher Editions:
**Resources for Differentiating Instruction**

When needed, resources are available to differentiate math instruction for students who may need to see a concept in a different way, practice prerequisite skills, or are ready to extend their learning.

**Approaching Level Resources**
- Remediation Activities
- Extra Examples
- Arrive Math Take Another Look Mini Lessons

**Beyond Level Resources**
- Beyond Level Differentiated Activities
- Extension Activities

**Resources for English Language Learners**

Rise/Reach also includes student and teacher resources to support students who are simultaneously learning grade-level math and building their English proficiency. Appropriate, research-based language scaffolds are also provided to support students as they engage in rigorous mathematical tasks and discussions.

**ELP**

- Spanish Interactive Student Edition
- Spanish Personal Tutors
- Math Language-Building Activities
- Language Scaffolds
- Think About It! and Talk About It! Prompts
- Multilingual eGlossary
- Audio
- Graphic Organizers
- Web Sketchpad, Desmos, and eTools

**Embedded Reteach Support**

**Arrive Math Booster Mini-Lessons**

Rise/Reach ensures a seamless connection for students who need extra topic support with embedded Arrive Math Booster mini-lessons. These mini-lessons, called Take Another Look, have been included in Rise/Reach to provide students direct support related to the lesson objective:

- Teacher-assigned option based on Example Check results
- Digital, student-driven lesson
- Gradual release experience in three parts

![Reteach Support](image)
B. Representation of Language Domains
WIDA defines language through expressive (speaking and writing) and receptive (reading and listening) domains situated in various sociocultural contexts.

1) Are the language domains (listening, speaking, reading, and writing) targeted in the materials? Yes No

2) Are the targeted language domains presented within the context of language proficiency levels? Yes No

3) Are the targeted language domains systematically integrated throughout the materials? Yes No

Justification: Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) All four language domains are targeted in the materials and provide opportunities for students to listen, speak, read, and write in each lesson. There is a “Launch the Module” and “Launch the Lesson” feature where the teacher will play a video or introduces the topic for the students to listen to and discuss. As would be expected, the Student Books are filled with problems for the students to solve in writing, as well as fill in the blank-style items. See examples of each domain represented in one lesson (8-5) from Course 1, Volume 2:

Listening: Reading and Writing: Speaking:
2) On page viii of each Language Development Handbook (for all three Courses), there is a chart entitled “Proficiency Level Descriptors” which outlines the three targeted proficiency levels of ELLs and then descriptors at each level, broken down by language domain. This chart, seen below, will guide the teacher as s/he works through the lessons and all four language domains:
Additionally, the lessons themselves in the LDH contain English Language Development Leveled Activities, to allow students at the three levels to engage appropriately with the content. In the example below, students at the Entering/Emerging level will be listening, reading and speaking. The Developing/Expanding level students will be doing the same but at a higher level and the students at the Bridging level will be writing in addition to engaging in the other three domains. See the example below from Course 3, Module 1, page T6:
3) The targeted language domains are systematically integrated throughout the materials. The lessons are all detailed and interactive, with opportunities to consistently engage in all four domains. During the “Launch the Lesson” section, students will typically be listening and also speaking. The students also have an opportunity to read and fill out a “What Will You Learn?” chart, seen below, so they can identify, by content topic, what they know already, what they have heard of, or what they don’t know:
Opportunities for speaking are also present throughout the materials. Several times throughout the lessons, there is a “Talk About the Example” feature where the students have a chance to process the information they are learning. See an example here:

Talk About It!
Describe an advantage of writing a product of repeated factors as a power.
4. The Strands of Model Performance Indicators and the Standards Matrices

The Strands of Model Performance Indicators (MPIs) provide sample representations of how language is processed or produced within particular disciplines and learning contexts. WIDA has five language development standards representing language in the following areas: Social and Instructional Language, The Language of Language Arts, The Language of Mathematics, The Language of Science, The Language of Social Studies as well as complementary strands including The Language of Music and Performing Arts, The Language of Humanities, The Language of Visual Arts.

The Standards Matrices are organized by standard, grade level, and domain (Listening, Speaking, Reading, and Writing). The standards matrices make an explicit connection to state academic content standards and include an example for language use. Each MPI includes a uniform cognitive function (adopted from Bloom’s taxonomy) which represents how educators can maintain the cognitive demand of an activity while differentiating for language. Each MPI provides examples of what students can reasonably be expected to do with language using various supports.

A. Connection to State Content Standards and WIDA Language Development Standards

1) Do the materials connect the language development standards to the state academic content standards? Yes No

2) Are the academic content standards systematically represented throughout the materials? Yes No

3) Are social and instructional language and one or more of the remaining WIDA Standards present in the materials? Yes No

Justification: Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) The materials connect the language development standards to the state academic content standards. The Language Development Handbook (LDH) for each Course (Grade Level) states on page vi “McGraw-Hill Education is committed to providing English Learners appropriate support as they simultaneously learn content and language.” Each Lesson in the LDH
connects the Language of Mathematics to the content topic of the lesson. An example is seen here, taken from Course 1, Module 1, page 4. The example uses Cornell Notes to help students understand the concept of ratios:

![Lesson 4 Notetaking](image)

2) The academic content standards are systematically represented throughout the materials. Each level of the program contains a table which shows the alignment of the program with the Standards for Mathematical Content, from the Common Core State Standards for Mathematics. See an example here from Course 1 (Grade 6):
In the Teacher Editions, at the beginning of each Module, the teacher is given an overview of the Standards that are being addressed through the “Focus” section. See an example below from Course 1, Volume 1, Lesson 1-1, page 3:

Furthermore, the teachers have a Suggested Pacing guide and a “Coherence” section which shows a vertical alignment with what Standard(s) the students studied previously, what they are going to study now and what comes next. Examples of these are seen here, from Course 1, Volume 1, page 1a:
3) Although not explicitly identified as the WIDA Social and Instructional Language Standard and the Language of Mathematics Standard, both of these language standards are represented in the materials. Oftentimes, the math problems are integrated with the social and instructional language of everyday activities, such as these examples of writing equations, from Course 3, Volume 1, page 230:
There is also a strong language focus throughout the materials. This example, from Course 1, Lesson 2, page 2 demonstrates how the materials integrate the language of math and everyday social and instructional language by using a flow chart to write about equivalent ratios:
B. Cognitive Challenge for All Learners at All Levels of Language Proficiency

1) Do materials present an opportunity for language learners to engage in various cognitive functions (higher order thinking skills from Bloom’s taxonomy) regardless of their language level?  
   **Yes**  
   **No**

2) Are opportunities for engaging in higher order thinking systematically addressed in the materials?  
   **Yes**  
   **No**

**Justification:** Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) The materials present an opportunity for language learners to engage in various cognitive functions and higher order thinking skills. The LDH provides guidance for facilitating
classroom discussions and offers multiple strategies for each level of proficiency that is identified. Teachers are given sentence frames to talk with students about their level of understanding, justify their reasoning, and agree or disagree with some else’s reasoning. Page xi of each LDH provides this guidance:

2) Opportunities for engaging in higher order thinking skills are systematically addressed throughout the materials. In each lesson, there are multiple opportunities for students to engage with the material in different ways. Oftentimes, they will be asked to think further about a problem, how to apply their understanding to another situation, or to talk about or justify their reasoning. The examples below come from the Course 3 Student Edition:
Some of the Practice areas, designed as homework for the students, will contain higher-order thinking problems, as seen here, from Course 3, Volume 1, page 110:

C. Supports for Various Levels of Language Proficiency

1) Do the materials provide scaffolding supports for students to advance within a proficiency level?  
   Yes  No
2) Do the materials provide scaffolding supports for students to progress from one proficiency level to the next?  
Yes  No

3) Are scaffolding supports presented systematically throughout the materials?  
Yes  No

Justification: Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) The materials provide scaffolding supports for students to advance within a proficiency level. The LDH is the primary resource for these supports, explaining detailed strategies and activities to use for each lesson and each proficiency level. Oftentimes vocabulary is the focus, where the teachers provide a word wall or word bank and the accompanying activities to promote understanding. In this example, from the LDH Course 3, page 1, students have a word bank and an equation to label, then they fill in a chart with the English word, the Spanish translation of it and the definition:

<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>power</td>
<td>potencia</td>
<td>producto de factores repetidos con un exponente y una base</td>
</tr>
<tr>
<td>base</td>
<td>base</td>
<td>en una potencia, el número que es el factor común</td>
</tr>
<tr>
<td>exponent</td>
<td>exponente</td>
<td>en una potencia, el número de veces que la base se usa como factor</td>
</tr>
</tbody>
</table>

![Image of word bank example](image-url)
2) The materials provide scaffolding supports for students to progress from one proficiency level to the next. Each lesson in the LDH gives teachers a three-column chart which have activities targeted at each of the identified language proficiency levels. When a student is ready to move to the next proficiency level, this chart will provide helpful supports and resources for the teacher to use. See the example of the Course 3, Lesson 2 English Language Development Leveled Activities chart:

![Course 3, Lesson 2 English Language Development Leveled Activities chart](image)

3) Scaffolding supports are presented systematically throughout the materials. On page xii of the LDH, there is a section called “How to Use the Teacher Edition.” This section explains that “the suggested strategies, activities, and tips provide additional language and concept support to accelerate English learners’ acquisition of academic English.” The categories of support are listed here:
In addition to peer and teacher support, other scaffolding supports include word cards, vocabulary squares, three-column charts, definition maps, concept webs and Cornell Notes. An example and description of the last two can be found on page xvi of the LDH:

**How to Use the Student Edition continued**

**Concept Web**

Concept webs are designed to show relationships between concepts and to make connections. Encourage students to find examples or words they can use in the web.

**Cornell Notes**

Cornell notes provide students with a method to take notes thereby helping them with language structure. Scaffolded sentence frames are provided for students to fill in important math vocabulary by identifying the correct word or phrase according to context.

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**English Learner Instructional Strategy**

Each English Learner Instructional Strategy can be utilized before or during regular class instruction.

Categories of the scaffolded support are:

- Vocabulary Support
- Language Structure Support
- Sensory Support
- Graphic Support
- Collaborative Support

The goal of the scaffolding strategies is to make each individual lesson more comprehensible for ELLs by providing visual, contextual and linguistic support to foster students’ understanding of basic communication in an academic context.

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**D. Accessibility to Grade Level Content**

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1) Is linguistically and developmentally appropriate grade-level content present in the materials? Yes No

2) Is grade-level content accessible for the targeted levels of language proficiency? Yes No

3) Is the grade-level content systematically presented throughout the materials? Yes No

**Justification:** Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) Linguistically and developmentally appropriate grade-level content is present in the materials. *Reveal Math* is a middle school program and the courses (1, 2, 3) correspond to the middle school grade levels (6, 7, 8). The lessons all identify the grade level appropriate content standards from the Standards for Mathematical Content (Common Core State Standards). There is a nice self-assessment at the beginning of each module that allows the students to see the topics that will be covered and assess whether they know it, have heard of it, or don’t know it:

<table>
<thead>
<tr>
<th>What Will You Learn?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place a checkmark (x) in each row that corresponds with how much you already know about each topic before starting this module.</td>
</tr>
<tr>
<td><strong>KEY</strong></td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>writing fractions and mixed numbers as decimals</td>
</tr>
<tr>
<td>writing decimals as fractions and mixed numbers</td>
</tr>
<tr>
<td>finding square roots and cube roots</td>
</tr>
<tr>
<td>identifying real numbers</td>
</tr>
<tr>
<td>describing sets of real numbers</td>
</tr>
<tr>
<td>estimating irrational numbers</td>
</tr>
<tr>
<td>comparing and ordering real numbers</td>
</tr>
<tr>
<td>graphing real numbers on a number line</td>
</tr>
</tbody>
</table>

Linguistically, there are a variety of differentiated/leveled activities provided in the LDH to help students comprehend the language they are using in the lesson. This language is appropriate for the grade level content being taught. Students are also given a list of vocabulary words they will learn in the module and again, asked to identify what they already know. See an example from Course 3, Volume 1, Module 5:
2) Grade level content is accessible for the targeted levels of language proficiency. The LDH provides ways for teachers to help students access the content by using strategies and supports appropriate for their language proficiency level. The main resource is the English Language Development Leveled Activities chart found at the beginning of each Lesson in the LDH, such as this one from Course 1, Module 5, page T28:

Students have multiple opportunities within each lesson to engage with the content in a variety of ways. They can talk about the problems, pause and reflect on their work, think about different ways to solve a problem and go online to find extra examples for further support.

3) Grade level content is systematically presented throughout the materials. The Teacher Editions outline the Standards for Mathematical Content that are addressed for each
Course (grade level). The Teacher Edition also has a “Focus” section that outlines the Domain (topic), Major Cluster(s), Standards for Mathematical Content, and Standards for Mathematical Practice. An example of this is seen here, from Course 3, Module 1, page 1a:

**Focus**

*Domain:* Expressions and Equations  
*Major Cluster(s):*  
8.EE.A Work with radicals and integer exponents.  

*Standards for Mathematical Content:*  
8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions.  
8.EE.A.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Used scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.  
Also addresses 8.EE.A.3.  
*Standards for Mathematical Practice:* MP1, MP2, MP3, MP4, MP5, MP6, MP7, MP8

### E. Strands of Model Performance Indicators

1) **Do materials include a range of language functions?**  
   *Yes*  
   *No*

2) **Are the language functions incorporated into a communicative goal or activity?**  
   *Yes*  
   *No*

3) **Do the language functions support the progression of language development?**  
   *Yes*  
   *No*

**Justification:** Provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

1) The materials include a range of language functions within each Lesson. Oftentimes the language functions are embedded into the content area standard(s) being addressed. In the LDH, the English Language Development Leveled Activities table provides teachers ideas for differentiating instruction that include a range of language functions. In the example below, from the LDH, Course 3, Lesson 2, students, depending on their proficiency level, will be asking questions, describing, and evaluating:
Additionally, there is a Collaborative Conversations chart on page ix of the LDH that provides a framework for students to engage in these conversations during each lesson. The “Core Skills” column are language functions themselves that the students can use, along with supporting prompts and response frames:
2) The language functions are incorporated into a communicative goal and/or activity throughout each lesson. As noted above, the students will be engaged in whole-class, small-group, and partner discussions for each lesson. The chart above provides support for all students to participate in these conversations as they are linguistically able. Although this is a math curriculum and the students will be writing and solving problems, the materials also incorporate communicative activities throughout so students can build their language skills using various language functions. An example is below, from Course
3, Lesson 1-1, page 9 where the students must compare and contrast the weight of animals, presented in an algebraic formula thus reinforcing the mathematical concept and building language proficiency at the same time:

<table>
<thead>
<tr>
<th>Animal</th>
<th>Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panther</td>
<td>$2^3 \cdot 3 \cdot 5$</td>
</tr>
<tr>
<td>Brown Bear</td>
<td>$2 \cdot 5^2 \cdot 7$</td>
</tr>
</tbody>
</table>

3) The language functions support the progression of language development. There is an emphasis not only on math comprehension, but also on language development as it relates to math. In the LDH there are two pages of resources under the heading “Strategies for Classroom Discussion.” These pages provide some overarching language functions (justify, elaborate, ask), along with strategies and leveled sentence frames/prompts for the teacher to use. This framework allows for the progression of language development as the teacher can move from one level to the next seamlessly as s/he recognizes that the students are ready. These two pages, x and xi, are shown below:
**Strategies for Classroom Discussion**

Providing multiple opportunities to speak in the classroom and welcoming all levels of participation will include English learners to take part in class discussions and build oral proficiency. These basic teaching strategies will encourage whole class and small group discussions for all language proficiency levels of English learners.

- **Wait time/Different Response**
  - Be sure to give students enough time to answer the question. They may need more time to process their ideas.
  - Let them know that they can respond in different ways depending on their levels of proficiency. Students can:
    - Answer in their native language, then you can rephrase in English.
    - Ask a more proficient EL student to repeat the answer in English.
    - Answer with nonverbal cues.

- **Asking about Meaning**
  - Reporting an answer offers an opportunity to clarify the meaning of a response.
  - Repeating an answer allows you to model the proper form for a response.
  - Specify any common errors, grammatical structures, sentence and use academic language.
  - When you repeat the answer, correct any grammar or pronunciation errors.

  **ENTERING/EMERGING**
  - What is ________?
  - What does ________ mean?
  - ________ is ________.
  - ________ means ________.

  **DEVELOPING/EXPANDING**
  - Could you tell me what ________ means?
  - ________ is similar to ________.
  - ________ is another way of saying ________.

  **BRIDGING**
  - Could you give me a definition of ________?
  - Can you point to the evidence from the text?
  - What is the best answer? Why?

- **Elicit**
  - Prompt students to give a more comprehensive response by asking additional questions or guiding them to get an answer, such as: can you tell me more?
  - This strategy is very effective when students are asked to justify or explain their reasoning.

- **Talk about Level of Understanding**
  - ENTERING/EMERGING
    - I understand it. I got it.
    - I don't understand the word/sentence.

  - DEVELOPING/EXPANDING
    - Could you tell me what ________ means?
    - ________ is another way of saying ________.

  - BRIDGING
    - I think I understand most of it.
    - I'm not sure I understand this completely.

- **Justify Your Reasoning**
  - ENTERING/EMERGING
    - I think ________.

  - DEVELOPING/EXPANDING
    - My reasons are ________.

  - BRIDGING
    - I think ________ because ________.

- **Agreeing with Someone’s Reasoning**
  - ENTERING/EMERGING
    - I agree with your reasons or point.

  - DEVELOPING/EXPANDING
    - I agree that ________.

  - BRIDGING
    - I have the same reasons as ________; I think that ________.

- **Disagreeing with Someone’s Reasoning**
  - ENTERING/EMERGING
    - I don't agree with your reasons.

  - DEVELOPING/EXPANDING
    - I don't agree that ________.

  - BRIDGING
    - I can see your point. However, I think that ________.