Protocol for Review of Instructional Materials for ELLs

WIDA PRIME Correlation
Introduction

The Protocol for Review of Instructional Materials for ELLs (PRIME) has been developed by World-Class Instructional Design and Assessment (WIDA) to assist publishers and educators in examining the representation of key elements of the WIDA English language proficiency standards in their materials.

The intent of this review is to identify the ways in which elements of the *WIDA English Language Proficiency Standards, 2007 Edition, PreKindergarten through Grade 12* are represented in the published materials. These materials vary from core or supplemental texts to DVDs to software programs; however, it is assumed that they all seek to provide teachers with standards-based references to use with English language learners in diverse settings across the United States.

The Protocol for Review of Instructional Materials for ELLs (PRIME) is not an evaluative tool aimed to judge the effectiveness of published materials using the WIDA English Language Proficiency (ELP) Standards. The goal of the Protocol for Review of Instructional Materials for ELLs (PRIME) is twofold:

- to aid publishers and correlators in developing materials and communicating how their materials incorporate or address aspects of the WIDA English Language Proficiency Standards, and
- to assist educators in making informed decisions in selecting instructional materials for programs serving English language learners.

WIDA welcomes the opportunity to work with both publishers and educators. WIDA realizes that it has a unique perspective on the conceptualization of language proficiency standards and how it envisions their use. It is our hope that by using this inventory, publishers will gain a keener understanding of some of the facets involved in the language development of English language learners as they pertain to their products.

Organization

The Protocol for Review of Instructional Materials for ELLs (PRIME) is organized into two parts that, as a whole, are intended to provide information about instructional materials in each of 14 criteria. Part 1 contains information about the materials that are to be reviewed. Part 2 is the protocol used for the review of instructional materials and includes space for publishers to explain the answers to the questions. An Appendix at the end of the document provides definitions of the categories included in the PRIME correlation.

Directions for completing the Protocol for Review of Instructional Materials for ELLs (PRIME) inventory:

**STEP 1:** Complete information about materials being reviewed.

**STEP 2:** Respond to the “Yes/No” questions about the presence of the criteria in the materials.

**STEP 3:** Provide justification to support your “Yes” responses. (Note: If additional explanation for “No” answers is relevant to readers’ understanding of the materials, this may also be included.)
Organization of the WIDA English Language Proficiency Standards In Relation to the Protocol for Review of Instructional Materials for ELLs

The 14 PRIME criteria are in **BOLD** below.

I. Performance Definitions
   (Criteria that shape the ELP Standards)
   - IA. Linguistic Complexity
   - IB. Vocabulary Usage
   - IC. Language Control/Conventions

II. English Language Proficiency Standards

III. Levels of English Language Proficiency
    (Entering, Beginning, Developing, Expanding, Bridging)
   - IIA. Presence of WIDA ELP Standards
   - IIB. Representation of Language Domains
     (Listening, Speaking, Reading, Writing)

IV. Strands of Model Performance Indicators
   - IVA. Language Functions
     - Attached to Context
     - Higher Order Thinking
   - IVB. Content Stem
     - Coverage and Specificity of Example Topics
     - Accessibility to Grade Level Content
   - IVC. Instructional Supports
     - Sensory Support
     - Graphic Support
     - Interactive Support
Part 1: Information About Materials

Publication Title(s): Operation: Tectonic Fury; Monster Storms; Infinite Potential; Resilient Planet (available in print and free online editions)

Publisher: The JASON Project

Materials/Program to be Reviewed: Tectonic Fury; Monster Storms; Infinite Potential; Resilient Planet

Tools of Instruction included in this review: Teacher Edition, Student Edition, Free Online Resources

Intended Teacher Audiences: Grades 4 to 12 Teachers

Intended Student Audiences: Grades 4 to 12 Students

WIDA Framework(s) considered: Summative and Formative

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

Social and Instructional Language; the Language of Language Arts, the Language of Mathematics, the Language of Science, the Language of Social Studies

WIDA English Language Proficiency Standards addressed: Language of Science, the Language of Social Studies

WIDA language proficiency levels included: 1–5

Most Recently Published Edition or Website: Copyright 2007, 2008, 2009, 2010; www.jason.org

In the space below explain the focus or intended use of the materials.

The JASON Project connects students with great explorers and great events to inspire and motivate them to learn science. JASON works with many leading organizations to develop multimedia science curricula based on their cutting-edge missions of exploration and discovery. By providing educators with those same inspirational experiences—and giving them the tools and resources to improve science teaching—JASON seeks to re-energize them for a lasting, positive impact on students at all levels of language proficiency.
Part 2: PRIME Correlation Tool

I. PERFORMANCE DEFINITIONS

IA. Linguistic Complexity (the amount and quality of speech or writing)

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<td>B.</td>
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<td>C.</td>
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A. Do the instructional materials take into account linguistic complexity for language learners?

B. Do the instructional materials address linguistic complexity for all of the targeted proficiency levels?

C. Is linguistic complexity systematically addressed, in multiple lessons, chapters, or units, in the materials?

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

A. The JASON Project Operation: Tectonic Fury—Unlocking Earth’s Geologic Mysteries program was developed to build science literacy for all students including English language learners. Tectonic Fury has four Missions, which are divided into Stages, Labs, and Field Assignments. Each Stage of a Mission is carefully constructed to promote learning using a variety of online programs to help students understand the concepts and academic language. The Stage begins with what students will learn and why and then builds background, introduces key concepts, and uses a variety of graphics. In the Teacher Edition for Tectonic Fury, the Teaching Tips (for Stage 1, see pages 12, 14, 16, 18, 20, 22) give teachers information on how to use the concept maps, the Meet the Researcher Video, Connect to Literature, the Mission 1 Briefing Video, Video Guiding Questions, transparencies, and other videos (Physical Properties of Minerals, Characteristics of Minerals, Mineral Formation) to provide strong visual support, promote oral language development, and monitor student understanding of the concepts. The Lab at the end of Stage 1 further enhances instruction with a hands-on learning experience for all learners. During each Stage, students are exposed to key science terms and concepts through many different media, differentiated activities, and interactive practice to promote understanding and build communicative skills.

B. The lesson structure described in part A is further augmented by the Differentiate and Extend sections on the pages in each Stage. These sections of the lessons provide instruction to accommodate language and concept development as well as build background. For Tectonic Fury, see Stage 1 for Differentiate and Extend sections on pages 12, 13, 14, 15, 17, 18, 19, 21, and 22. The Discuss section also has prompts that encourage vocabulary development by using definitions and examples that expand understanding of the terms.

C. The program was developed with a consistency of instruction so that the features described in parts A and B are used in each of the Stages in each Mission included in the program. All the components of the program help to provide consistent instruction and practice to assist students in developing key language and content skills.
IB. Vocabulary Usage (specificity of words, from general to specific to technical)

YES  NO

A.  Is vocabulary usage represented as words, phrases, and expressions in context?  ☑  ☐

B.  Is vocabulary usage addressed in the materials for all of the targeted levels of proficiency?  ☑  ☐

C.  Are general, specific, and technical language usage systematically presented throughout the materials?  ☑  ☐

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

A.  In each lesson in the JASON project, vocabulary words are highlighted in the selection. These words are intended to be presented by the teacher as the lesson is used. Page T14 provides information about Key Vocabulary. The Mission at a Glance pages 12A and 12B list the Key Vocabulary for the mission so that the words can be presented prior to using the lesson as discussed on page T14. Within every page of the lesson the science terms are discussed and clarified to make sure they become an integral part of the learning experience. The DVD gives students an audio and visual presentation to help incorporate the science concepts into their real-world experiences. This type of interaction helps students in the classroom learn the concept by participating with the students in the DVD in their explorations with the scientists.

B.  The structure of the lessons for each Mission focuses on science vocabulary as the key to understanding the content in the lessons. The pictorial and graphic presentation in the text as well as the audio and visual presentation on the DVD gives students ample opportunity to see and hear the terms and then use them to describe the science being presented. Students of all levels can become actively involved in learning the terms with the highly interactive presentation of each topic. The enthusiasm of the scientists and the participating students help make learning science content and vocabulary enjoyable for every student.

C.  As described in parts A and B, the program lessons with graphics and the accompanying audio and visual DVD help students to understand and use the vocabulary and concepts. This structure is found in every Stage of each Mission so that the lesson concept can be interpreted and understood by all learners. The motivational real-world student learners on the DVD show how interactive learning helps everyone understand the real world of science.
IC. Language Control/Conventions (comprehensibility of language)

YES  NO

A. Are opportunities to demonstrate language control presented in the materials?

B. Do opportunities to demonstrate language control correspond to all targeted levels of language proficiency?

C. Are opportunities to demonstrate language control systematically presented in the materials in multiple chapters, lessons, or units?

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

A. The structure of the lesson (See Tectonic Fury, Mission 1) has Prepare (12A–12B), Motivate (12–13), Teach (14–31), and Reflect and Assess (32–33). The concepts are presented, discussed, and reviewed in a number of lesson sections. Vocabulary for the science concepts is interwoven into each of the sections of the lesson structure. During the Teach section, the Discuss, Extend, Think Critically, and Teach with Inquiry subsections help students to learn the content and concepts. The interactive lesson structure encourages students to participate in a purposeful learning environment that guides them to master content and skills.

B. Each page of the Student Edition has a wide variety of visual content (See Student Edition Mission 1, pages 12 to 33). The visual nature of the lesson pages and the interactive DVD helps all students master science content and concepts. In addition, the Differentiate section in the Teacher Edition helps teachers adjust the topics to fit students' needs.

C. The structure and content described in parts A and B are found in every Stage of a Mission. This consistency of format ensures that systematic language control is automatically a part of each part of the learning process. The information on page T3 explains the JASON Framework to motivate students by presenting easy-to-use technology-rich content. Page T4 provides a list of resources and tools to help students master skills through a meaningful learning experience.
II. ENGLISH LANGUAGE PROFICIENCY (ELP) STANDARDS

IIA. Presence of WIDA English Language Proficiency Standards

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A. Are social and instructional language and one or more of the remaining WIDA Standards (the language of Language Arts, of Mathematics, of Science, and of Social Studies) present in the materials?

B. Do the materials systematically integrate Social and Instructional Language and the language of the targeted content area(s)?

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

A. The JASON project focuses on the science curriculum and connects students with great explorers and great events to inspire and motivate them to learn science. The materials are developed to help students learn the science terms (Key Vocabulary) related to a science topic. Each Mission is correlated to the National Science Education Standards for the content. Page T5 in the Teacher Edition for Tectonic Fury provides a standards alignment to the National Science Education Standards for this Mission. A complete correlation for each topic can be found on the JASON Mission Center site that shows each state’s content standards covered in the Mission including a grade level designation. The use of social and instructional language is woven into the lesson text for each Stage of the Mission. The terms are presented, defined, and developed as students participate in a wide assortment of activities where they use all aspects of language. Language skills are practiced within the written text and colorful graphics in the Student Edition with the accompanying the Teacher Edition content that incorporates the DVD audio and visual interactive materials.

B. As described in part A, the Mission and the Stages cover a wealth of content in science as well as all areas of curriculum for listening, speaking, reading, and writing. The systematic and structural development of the content and skills in the program incorporates all the features of language development for literacy and is based on well-defined goals for each lesson. In addition to the basic lesson material in the Teacher Edition, specific notes are included to address all aspects of the skills and the needs of the learners. See pages 12, 13, 14, 15, 17, 19, 21, and 22 for a typical assortment of Differentiate and Extend instruction to accommodate all levels in a Stage in the Teacher Edition for Tectonic Fury. These activities are found in every Stage of every Mission.
IIB. Representation of Language Domains

YES   NO

☑️  ❌  A. Are the language domains (listening, speaking, reading, and writing) targeted in the materials?

☑️  ❌  B. Are the targeted language domains presented within the context of language proficiency levels?

☑️  ❌  C. Are the targeted language domains systematically integrated throughout the materials?

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

A. Each Teacher Edition in the JASON Project is based on a science topic that is divided into several Missions. The Missions are divided into Stages that include a Lab or a Field Assignment. At the beginning of each Teacher Edition, the Mission at a Glance page (see page 12A in the Teacher Edition for Tectonic Fury) shows how to break the Mission into lessons and provides the time frame and key program elements from the online JASON Mission Center. The brief description on the chart identifies the lesson segments and components that help to foster science knowledge while including the listening, speaking, reading, and writing skills.

B. This science content program guides students as they explore the world of science. Helping them acquire the language of the content is a key feature of the program. The text and graphics provide instruction for students as they learn the terms for the lesson. Language proficiency levels are included in the speaking, listening, and visual aspects of the Missions of the JASON Project. Among the DVD, online, and printed materials, numerous listening, reading, writing, and speaking activities are provided to help students develop language proficiency as they become involved in science content.

C. The instructional features described in parts A and B for the integrated approach to all aspects of language development are found in every Mission in each Operation of the JASON Project. The interactive nature of the program provides thorough, systematic instruction in the listening, speaking, reading, and writing language domains related to content areas. The components in the Student Edition, Teacher Edition, and DVD presentations provide experiential learning opportunities and are supported by a vast array of technology tools to assist a wide range of language learners.
III. LEVELS OF LANGUAGE PROFICIENCY

IIIA. Differentiation of Language (for ELP levels)

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

A. The program was created to improve teaching and learning by connecting teachers and students with the world’s leading researchers and experts engaged in real scientific explorations. Interactive games and digital labs, video segments, online student journals, and other resources and tools are used in each Mission to make the experience accessible to all students. The main goal is to interest students in learning about science, and the materials include a wide variety of tools to address all levels of proficiency. Language-limited students can gain from the real-world experiences and develop knowledge about the concepts as they listen, watch, and participate in the activities. Page T4 in the Teacher Edition for Tectonic Fury explains all the materials available to use with all levels of language proficiency. The program includes methods to help teachers differentiate instruction to make content language comprehensible for English language learners at various levels of proficiency.

B. With the science-content orientation of the program, students are encouraged to participate in all the learning experiences to develop an understanding of science and to expand their knowledge. The language focus is science, but the interactive experiences allow the untrained observer to become acquainted with and use the terms. Page T8 in the Teacher Edition for Tectonic Fury provides information about engaging students to be inquiry-based learners. The experimental design and procedure are to be discussed and explained to students so that they can understand the processes in science. Page T9 helps accommodate all learners by providing many methods to use so that students can participate in the discussions and answer the lesson questions. Page T10 suggests six main reading strategies to develop with all readers, especially struggling ones. These reading strategies are useful in helping students gain meaning from the text. Page T7 explains connections to other content areas and to literature. These connections can be used to enhance the curriculum.

C. Parts A and B present the science focus of the program that is designed to motivate all students to participate in the discovery of the wonders of science in real-world projects. To achieve that goal, the program provides a complete instructional plan to introduce skills within a lesson, across a unit, between units in a grade, and across the grades. This carefully developed structure permits students to progress and attain goals.
IIIB. Scaffolding Language Development (from ELP level to ELP level)

YES  NO

A. Do the materials provide scaffolding supports for students to advance within a proficiency level?

B. Do the materials provide scaffolding supports for students to progress from one proficiency level to the next?

C. Are scaffolding supports presented systematically throughout the materials?

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

A. Each Operation in the JASON project is based on a single specific science topic (Tectonic Fury—Unlocking Earth’s Geologic Mysteries, Monster Storms—Exploring the Powerful Forces of Weather, Infinite Potential—Restructuring the Energy Portfolio, Resilient Planet—Protecting Our Ecological Future). Each Stage of each Mission related to the topic is designed to encourage student participation. The curriculum is supported by state-of-the-art tools for customizing lesson plans, assessments, standards alignment, and reporting functions for school use to assist students. The unique technology platform allows teachers and students to work in virtual teams with one another, with scientists, and with other students and teachers everywhere, as a global community of learners. The highly interactive program allows scaffolding within every phase of the instruction. This structure is designed to accommodate all levels of learners in the development of language proficiency.

B. See pages T14 to T16 in the Teacher Edition for Tectonic Fury to walk through the instructional features that allow for an integrated science experience with interactive learning features. The lesson sections—Prepare, Motivate, Teach, and Reflect and Assess—give a quick orientation of the program materials and instructional tools and how they can used to help students of all levels progress in the acquisition of science content. From Key Vocabulary to Online Resources to Transparencies, Journals, and Blackline Masters, the materials promote instructional flexibility to allow for scaffolding within and across activities.

C. Parts A and B describe the content, resources, and classroom tools including interactive games, digital labs, video segments, and online student journals used to provide a classroom experience that helps everyone become actively involved in the learning process. This structure allows all students to work in the science content and receive valuable experiences.
IV. STRANDS OF MODEL PERFORMANCE INDICATORS

IVA. Language Functions

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Context

A. Do the materials include a range of language functions?

B. Do the language functions attach to a context (i.e. are they incorporated into a communicative goal or activity)?

C. Are language functions presented comprehensively to support the progression of language development?

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

A. The program provides many opportunities for students to participate and expand their language proficiency. The science content is extensive. It is presented through a variety of methods that enable all students to develop listening, speaking, reading, and writing skills. Students work as a whole class, in small groups, with a partner, or independently. In each lesson segment, students display language functions as they discuss, describe, evaluate, and respond to the topic. All of the activities in the lesson sections of each Mission provide many opportunities for students to use language. The Guiding Questions and Journal Questions are woven into each lesson and help identify whether students are gaining language proficiency. See page T6 in the Teacher Edition for Tectonic Fury for an explanation of these sections.

B. All of the language functions in the program are integral to the content areas that are the foundation of the activities and instruction in the program. Each Mission is divided into Stages that are divided into lessons that concentrate on the development and exploration of science content. Page T4 in the Teacher Edition for Tectonic Fury lists the multimedia and print resources and the teaching strategies that can be used to help implement the program. Each part of the lesson works to integrate content concepts with language functions to help students read, talk, and write about the content.

C. The program was designed to provide a wealth of real-world experiences as students and teachers actively engage in education through exploration. A review of the Mission at a Glance chart on page 12A in the Teacher Edition for Tectonic Fury shows how the content shapes the instruction in the program. Every effort has been made to show the variety of materials, which not only provide a comprehensive approach to the learning process but also support the continuous development of language. The array of audio, visual, and technological components supports all aspects of learning for all levels of learners.
YES  NO  **Higher Order Thinking**

D. Are opportunities to engage in higher order thinking present for students of various levels of English language proficiency?

☑  ☐

E. Are opportunities for engaging in higher order thinking systematically addressed in the materials?

☑  ☐

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

D. The JASON Framework described on page T3 in the Teacher Edition for Tectonic Fury explains how every JASON Operation seeks to address three Guiding Questions: What are the dynamic systems of Earth and space? How do these systems affect life? What technologies do we use to study these systems and why? These Guiding Questions are explored as students use higher-order thinking skills to draw conclusions, make inferences, determine main ideas, identify cause and effect, make generalizations, and clarify fact and opinion. Within the lessons, the Think Critically sections provide many opportunities to use higher-order thinking skills to relate learning to real-world events. Page T6 explains the curriculum goals related to the Think Critically and Teach with Inquiry sections of the lesson. (See also lesson pages 6, 12, 16, and 20.) Many higher-order thinking skills are also included in the Discuss questions on each page.

E. Higher-order thinking skills are an integral part of each lesson as explained in part D. The Mission at a Glance page for the lessons in each Mission identifies the Check for Understanding and Think Critically sections. (See example page 12A in the Teacher Edition for Tectonic Fury.) This chart shows that the higher-order thinking skills are addressed in every part of each lesson and across all of the Operations in the JASON Project. As students explore each Stage of a Mission, they are asked to think about the topic and to relate the information to the world.
IVB. Content Stem

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<th>Coverage and Specificity of Example Content Topics</th>
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<td>A. Do examples cover a wide range of topics typically found in state and local academic content standards?</td>
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<td>B. Are example topics accessible to English language learners of the targeted level(s) of English language proficiency?</td>
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<td>☑️</td>
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<td>C. Are example topics systematically presented throughout the materials?</td>
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Justification: In the box below provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.

A. The content in each Operation is correlated to the National Science Education Standards. See page T5 in the Teacher Edition for Tectonic Fury for the standards alignment for the Missions in this Operation. Complete correlations for each topic can be found on the JASON Mission Center site, which shows how each state’s content standards are covered in an Operation’s Missions including a grade level designation. Because the JASON Project is a standards-based curriculum, each Operation and Mission topic allows students to experience authentic exploration and discovery based on the work of scientists in the field today. Page T7 shows the connections to chemistry, technology, history, and culture for the Operation: Tectonic Fury lessons. Similar charts are available in the other Teacher Editions and cover many subject areas found in the content standards.

B. With science content as the basis for the JASON Project, the pictorial and graphic presentation in the text as well as the audio and visual presentation on the DVD gives students many opportunities to read, hear, and use the terms involved in the science being presented. The nature of the components and technology that comprise the program allows all of the information to be available to all levels of language proficiency. Student interaction with the content is a key feature as students both read and hear the information. Page T4 in the Teacher Edition for Tectonic Fury provides a summary of the many multimedia and print resources available to help all students become actively involved in learning about science. See also pages T17–T19 for a Teacher Tour of the JASON Mission Center, which contains content, resources, and classroom tools to help all levels function with the content.

C. Parts A and B explain how the program was developed to allow in-depth learning of content by providing multimedia components in an interactive environment that present academic vocabulary and science concepts without sacrificing the joy of learning. In each Operation, the content topics that are included were selected based on the content standards from the various subject area standards. This guarantees that important topics are presented and systematically taught.
YES  NO  Accessibility to Grade Level Content
☐  ☐  D.  Is linguistically and developmentally appropriate grade level content present in the materials?

☐  ☐  E.  Is grade level content accessible for the targeted levels of language proficiency?

☐  ☐  F.  Is the grade level content systematically presented throughout the materials?

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

D.  Each Operation in the JASON Project aligns to the National Science Education Standards. See the chart on page T5 of the Teacher Edition for Tectonic Fury. The Mission Center site lists specific state standards for appropriate grade levels. The science-based nature of the materials means that the language level includes many specific science terms. The program explains these terms using a wide variety of audio and visual techniques to help all learners become actively involved as they learn the concepts. The student materials are colorfully illustrated combining words and pictures to ensure that students at all levels understand the meanings of the key science terms. The interactive technological materials further assist learners as they read, hear, and talk about the science topics.

E.  The Mission at a Glance charts on pages 12A and 12B of the Teacher Edition for Tectonic Fury show the content, the program components, and the wide variety of choices that can be used to accommodate and cover all levels of skill development as well as the concepts and terms related to the topic.

F.  Parts A to E explain the structure of the program and how each Operation presents the science content for the specific topic. The information in the Student Edition, Teacher Edition, and the multimedia resources provides a thorough and systematic study of the key vocabulary and concepts for the topic. The well-designed interactive materials help all learners become visually and verbally involved in the learning process.
IVC. INSTRUCTIONAL SUPPORTS

YES NO Sensory Support
✓ □ A. Are sensory supports, which may include visual supports, present and varied in the materials?
✓ □ B. Are sensory supports relevant to concept attainment and presented in a manner that reinforces communicative goals for the targeted levels of proficiency?
✓ □ C. Are sensory supports systematically presented throughout the materials?

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

A. Throughout each of the Operations in the JASON Project, the curriculum is supported by state-of-the-art tools for customizing lesson plans, assessments, standards alignment, and reporting functions. The JASON Mission Center has articles, images, videos, Labs, and Field Assignments. Visuals, real-world objects, models, and audiovisual aids are ways to provide examples of concepts and vocabulary. Touching, seeing, hearing, acting, and playing are integrated into the lessons so that students are actively involved in the learning process. The photos and graphics have been carefully created to allow students to see the content in a visual way. Activating the visual/spatial parts of their brains at the same time as the verbal/linguistic parts will allow deeper understanding of the text. The interactive approach involves all the senses.

B. The materials discussed in part A are an integral part of the lesson instruction and are valuable tools to help students learn the skills. The ability to hear, see, say, and touch while learning skills and concepts directly involves students and encourages skill mastery. The extensive technology materials provide many interactive activities for students to do so that they are actively engaged in the learning process using all sensory tools. The students use their sensory supports to learn the content and to integrate the concepts and ideas into their world.

C. The materials for each Operation in the JASON Project all follow the pattern described in parts A and B. The use of a variety of learning modalities helps students receive, learn, and use the skills presented. See pages T14 to T16 in the Teacher Edition for Tectonic Fury for an explanation of the elements and features of the Teacher Edition. See pages T17 to T19 for a description of the JASON Mission Center for content, resources, and other classroom tools.
YES NO  Graphic Support

D.  Are graphic supports present and varied in the materials?

☑  ☐ D. The JASON Project educational materials contain a variety of graphic supports, including photographs, illustrations, charts, and diagrams, to help students learn how to locate information in graphics and how to understand information presented in graphic form. The four-color graphics provide a wealth of information that students can use as they study the concepts and identify science content. The Student Edition includes a variety of graphics to support and expand on the content. See pages 14 to 29 of the Tectonic Fury Student Edition for a representative set of graphic-rich pages for a Stage in a Mission. All of the electronic tools for each Operation also provide carefully selected and colorful photographs, illustrations, and diagrams of real-world sites to help students interpret and understand the content.

E.  Are graphic supports relevant to concept attainment and presented in a manner that reinforces communicative goals for the targeted proficiency levels?

☑  ☐ E. As noted in part D, a review of one Stage of a Mission in any Operation in the Student Edition shows how systematically and thoroughly graphics are woven into every part of every lesson to help all learners grasp the content discussed in the text. With the multimedia audio and visual resources that accompany the print resources, the program addresses and assists all levels of learners by using colorful graphics to incorporate visual learning. See page T4 of the Teacher Edition for Tectonic Fury for the complete list of Online Resources, Video/Programming Resources, Online Multimedia Tools, Communications Tools, Assessment Tools, Professional Development Resources and Courses, and Argonaut Resources. Throughout the program, the graphic supports extend understanding and play a key role in vocabulary and content development.

F.  Are graphic supports systematically presented throughout the materials?

☑  ☐ F. Graphic supports are found in all Missions of the program. In all Stages of each Mission, the graphics are tailored to the content to assist all learners to see and hear about important science concepts. The complexity and extensiveness of the supports are based on the topic of each Mission. The examples listed in parts D and E show the scope and depth of the visual supports in the materials.

Justification: In the box below provide examples from materials as evidence to support each “yes” response for this section. Provide descriptions, not just page numbers.
Interactive Support

G. Are interactive supports present and varied in the materials?

H. Are interactive supports present and relevant to concept attainment for the targeted proficiency levels?

I. Are interactive supports varied and systematically presented in the materials?

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

G. Throughout all the materials in the Operations for the JASON Project, interactive supports are a valuable part of the learning experience and are thoroughly incorporated into the lessons. Review the following information in the Teacher Edition for Tectonic Fury. Beginning with the Mission introduction (see pages 12 and 13), the Meet the Researcher video is presented as a group activity. Using the Discuss questions will help students to explore the content presented by the scientist, Dr. Wise. See page T9 for ten different Discussion Strategies to use. From Think/Pair/Share to Timed Brainstorming to Wheels to Inside Outsides strategies, a variety of interactive techniques can be used with any group to assist in learning the content. Pages 12 and 13 also list the array of interactive tools to use with students. Every set of pages in every Teacher Edition presents the content using a wide range of teaching and learning tools.

H. In the instructional part of every lesson, a variety of techniques is used to assist learners and to ensure that they gain the skills for success in mastering the content. Discussion Strategies on page T9 and Reading Strategies on pages T10 and T11 are additional tools to help present the content and provide teaching techniques to use with all learners. Lessons identify and introduce the content, provide teacher instruction for the skill, and then use a variety of practice activities. All of these techniques are intended to accommodate all levels of learners in the development of skills.

I. A review of the references in parts G and H shows the variety of methods and the systematic structure of the program that includes interactive supports in each lesson in every Operation. The JASON Project was developed to provide highly interactive learning experiences. These experiences address students’ interests, needs, social interactions, and development levels. Within the teaching environment, instruction allows students to participate in all types of interactive experiences to help them succeed in content, concept, and skill acquisition.
Appendix

I. **Performance Definitions** – the criteria (linguistic complexity, vocabulary usage, and language control) that shape each of the six levels of English language proficiency that frame the English language proficiency standards.

   IA. **Linguistic Complexity** – the amount and quality of speech or writing for a given situation
   IB. **Vocabulary Usage** – the specificity of words (from general to technical) or phrases for a given context
   IC. **Language Control/Conventions** – the comprehensibility and understandability of the communication for a given context

II. **English Language Proficiency Standards** – the language expectations of English language learners at the end of their English language acquisition journey across the language domains, the four main subdivisions of language.

   IIA. **Five WIDA ELP Standards:**
      1. English language learners communicate for Social and Instructional purposes within the school setting.
      2. English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Language Arts.
      3. English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Mathematics.
      4. English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Science.
      5. English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Social Studies.

   IIB. **Domains:**
      • **Listening** – process, understand, interpret, and evaluate spoken language in a variety of situations
      • **Speaking** – engage in oral communication in a variety of situations for a variety of audiences
      • **Reading** – process, understand, interpret, and evaluate written language, symbols and text with understanding and fluency
      • **Writing** – engage in written communication in a variety of situations for a variety of audiences

III. **Levels of English Language Proficiency** - The five language proficiency levels (1-Entering, 2-Beginning, 3-Developing, 4-Expanding, 5- Bridging) outline the progression of language development in the acquisition of English. The organization of the standards into strands of Model Performance Indicators (MPIs) illustrates the continuum of language development.

   IIIA. **Differentiation** – providing instruction in a variety of ways to meet the educational needs of students at different proficiency levels
   IIIB. **Scaffolding** – building on already acquired skills and knowledge from level to level of language proficiency based on increased linguistic complexity, vocabulary usage, and language control through the use of supports.
IV. **Strands of Model Performance Indicators** – examples that describe a specific level of English language proficiency for a language domain. Each Model Performance Indicator has three elements: Language Function, Content Stem, and Support

IVA. **Language Functions** – the first of the three elements in model performance indicators indicates how ELLs are to process and use language to demonstrate their English language proficiency.
   • **Context** – the extent to which language functions are presented comprehensively, socially and academically in materials
   • **Higher Order Thinking** – cognitive processing that involves learning complex skills such as critical thinking and problem solving.

IVB. **Content Stem** – the second element relates the context or backdrop for language interaction within the classroom. The language focus for the content may be social, instructional or academic depending on the standard.

IVC. **Instructional Support** – instructional strategies or tools used to assist students in accessing content necessary for classroom understanding or communication and to help construct meaning from oral or written language. Three categories of instructional supports include sensory, graphic and interactive supports.
   • **Sensory support** – A type of scaffold that facilitates students’ deeper understanding of language or access to meaning through the visual or other senses.
   • **Graphic support** – A type of scaffold to help students demonstrate their understanding of ideas and concepts without having to depend on or produce complex and sustained discourse.
   • **Interactive support** – A type of scaffold to help students communicate and facilitate their access to content, such as working in pairs or groups to confirm prior knowledge, using their native language to clarify, or incorporating technology into classroom activities.