INTENSIVE INTERVENTION

at American Institutes for Research





Intervention Taxonomy Brief: Lexia[®] PowerUp Literacy[®]

The goal of this brief is to provide educators with information they can use to evaluate the appropriateness of Lexia® PowerUp Literacy® for a specific student or group of students who require supplemental and intensive intervention. The brief also may be used to guide decisions about the selection or purchase of a new intervention. We envision that the brief may allow users to examine the extent to which the program aligns to the Taxonomy of Intervention Intensity, a framework used by educators to categorize interventions along key dimensions. The information included in this brief is organized along the seven dimensions of the Taxonomy of Intervention Intensity and can assist educators in answering the following questions:

- Does evidence suggest that this intervention is expected to lead to improved outcomes in the identified area of need (**strength**)?
- Will the group size, duration, structure, and frequency provide sufficient opportunities for students to respond and receive corrective feedback (**dosage**)?
- Does the intervention match the student's identified needs (alignment)?
- Does the intervention assist the student in generalizing target skills to general education or other tasks (attention to transfer)?
- Does the intervention include elements of explicit instruction (comprehensiveness)?
- Does the student have opportunities to develop the behavior skills necessary to be successful (behavioral support)?
- Can the intervention be individualized with a data-based process to meet student needs (individualization)?

To learn more about the Taxonomy of Intervention Intensity and find resources to support implementation, visit https://intensiveintervention.org/taxonomy-intervention-intensity.

Program Summary

PowerUp Literacy accelerates literacy gains for students in Grades 6–12 who are at risk of not meeting college- and career-ready standards (Exhibit 1). Blending online student-driven instruction with offline teacher-delivered lessons and activities, PowerUp Literacy simultaneously addresses gaps in fundamental literacy skills while building higher order thinking skills to enable students to access grade-level content. Offering an unparalleled level of personalization, PowerUp Literacy addresses the instructional needs of a wide range of students, whether they are several grade levels behind or show some risk of not meeting college- and career-ready standards. With 120 unique placement combinations, each student begins their journey in PowerUp Literacy based on their individual strengths and needs. Adaptive instruction differentiates learning as students progress through the three strands of PowerUp Literacy: Word Study, Grammar, and Comprehension. Embedded progress monitoring, actionable data, and scripted lessons empower teachers—regardless of their area of expertise—to deliver the exact

instruction each student needs. PowerUp Literacy delivers rigorous content and skills instruction through an engaging, personalized approach that helps students become proficient readers and confident learners.

Table 1. Program Information

Features of program implementation	Program recommendations		
Grade level(s)	6–12		
Group size	Individual; small group		
Intervention length			
Frequency	1–5 times per week		
Session duration	20–30 minutes		
Cost	PowerUp licenses can be purchased for individual students, school buildings, entire school districts. For more detailed pricing information, complete this form (https://www.lexialearning.com/go/talk-to-us) to be contacted by a Lexia sales representative.		
Training	Lexia has multiple professional development offerings. Through Success Partnerships, a customer success team can partner with a school or district to customize training based on their goals and timelines. Support includes implementation planning, product training, data reviews, and data coaching throughout the year. Training events can take place on-site at schools or virtually. As part of the Success Partnerships, school and district staff have professional development and training opportunities through Lexia Academy, a self-paced eLearning platform that supports educators'		
	professional growth. Courses in Lexia Academy are structured with incremental learning segments to help busy educators integrate resources and strategies to support blended learning, literacy instruction, and product implementation. To learn more, visit https://www.lexialearning.com/customer-success/success-partnerships .		

Evidence of Taxonomy of Intervention Intensity Dimensions

The following section presents definitions for the Taxonomy of Intervention Intensity dimensions and a summary of intervention-specific evidence for each dimension. The evidence comes from the intervention's vendor or developer. It is accurate as reported to the National Center on Intensive Intervention (NCII); it was not independently verified by NCII. Additional program evidence can be found on the NCII Tools Chart and might appear on the What Works Clearinghouse. For specific questions about the content, contact the publisher at https://www.lexialearning.com/ or 978-405-6200.

Taxonomy Dimension: Strength

Strength tells us how well the program works for students with intensive intervention needs, expressed in terms of effect sizes. Effect sizes greater than 0.25 indicate an intervention has value in improving outcomes. Effect sizes of 0.35 to 0.40 are moderate, and effect sizes of 0.50 or larger are strong (preferred).

Exhibit 2 provides the effect sizes for students in need of intensive intervention organized by domain and subdomain. These effect size data are calculated on low-achieving participants, those falling at or below the 20th percentile on pretest measures of achievement. If available, additional effect sizes for disaggregated data can be found on the NCII Tools Chart.

Exhibit 2. PowerUP Literacy Effect Sizes for Students ≤20th Percentile by Domain and Subdomain

Domain	Subdomain	Outcome measures	Effect size ^a
Reading	Broad Reading	STAR Reading	0.27

^a To ensure comparability of effect size across studies, NCII uses a standard formula to calculate effect sizes across all studies and outcome measures—Hedges *g*, corrected for small-sample bias.

Taxonomy Dimension: Dosage

Dosage is the number of opportunities a student has to respond or practice and receive corrective feedback. Dosage may be impacted by the size of the instructional group, the number of minutes each session lasts, the number of student-teacher interactions built into lessons, and the number of sessions provided per week.

The *PowerUp* blended learning model combines student-driven instruction with offline teacher-delivered lessons and activities for face-to-face instruction and hands-on practice. The online program consists of 35 levels (12 for Word Study, seven for Grammar, and 16 for Comprehension), each providing opportunities to learn and practice a target reading skill. Each level of Grammar and Comprehension has four activities. Grammar includes four to eight units per activity, and Comprehension includes 15 units per activity. Word Study has six activities in each level, and each activity has two to 11 units. Online activities are paired with related offline materials designed to support face-to-face instruction, independent practice, and learning extensions. For example, each online activity has corresponding teacher-delivered Lexia Lessons[®].

For the purposes of this taxonomy, a "lesson" is considered one online unit (within the larger online activity) along with one corresponding face-to-face lesson that can be delivered to individual students or small groups.

Assuming a group size of one student for the online unit and two students for the offline lesson each student in the group has an estimated 29 opportunities to respond and receive corrective feedback.

Taxonomy Dimension: Alignment

Alignment (Exhibit 3) focuses on how well the program (a) addresses the target student's full set of academic skill deficits, (b) does not address skills the target student has already mastered (extraneous skills for that student), and (c) incorporates a meaningful focus on grade appropriate curricular standards.

Exhibit 3. Alignment With Content Areas Addressed

Instructional grade level(s)	Content area addressed	Skill strands
Grades 6–12	Reading	 Word Study
		■ Grammar
		 Comprehension
		 Phonic Word Attack Strategies
		Structural Analysis
		 Vocabulary

Taxonomy Dimension: Teaching to Promote Transfer

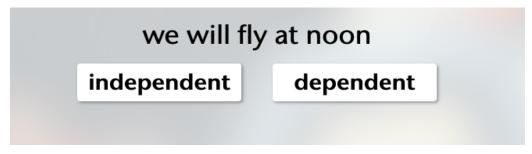
Attention to transfer is the extent to which an intervention is designed to help students (a) transfer the skills they learn to other formats and contexts and (b) realize connections between mastered and related skills.

The following activities are examples of how *PowerUp* is designed to explicitly teach for transfer.

For complex sentences (instructional target), three activities designed to explicitly teach for transfer are identifying dependent and independent clauses after viewing an instructional video, ordering and combining clauses using a subordinating conjunction, and identifying all parts of a complex sentence. In the online component of *PowerUp*, the instructional units within each activity are sequenced to teach for transfer, building up complexity from one unit to the next, and, in turn, integrating opportunities to transfer skills to other formats and contexts. For example, when learning complex sentences, students practice categorizing clauses as dependent or independent following an instructional video. Next, the student practices combining clauses using a subordinating conjunction to create a complex sentence. For students who need additional support, the Lexia Lesson on complex sentences delivers teacher-led explicit instruction and additional practice that allow students to transfer skills to contexts outside the online program.

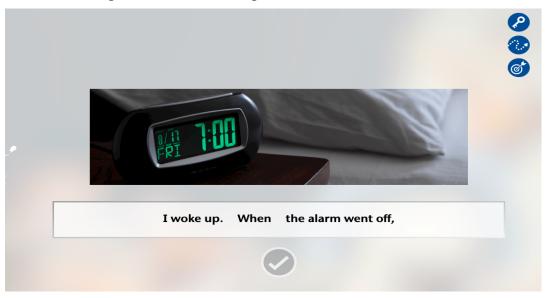
Activity 1: Identifying Dependent and Independent Clauses. In this task, students determine whether the clause is dependent or independent. Exhibit 4 is an example from the online component of how students can apply what they learned following an instructional video on dependent and independent clauses.

Exhibit 4. Identifying Clauses Example



Activity 2: Ordering and Combining Clauses. Exhibit 5 is an example from the online component that demonstrates how students will transfer their knowledge of identifying dependent and independent clauses to create a complex sentence.

Exhibit 5. Complex Sentences Example



Activity 3: Creating Complex Sentences.

Exhibit 6 is an example of a Lexia Lesson final activity that students complete after receiving explicit instruction from the teacher, reviewing the anchor chart, and receiving additional practice on how to identify dependent and independent clauses.

Taxonomy Dimension: Comprehensiveness

Comprehensiveness is the number of explicit instruction principles the intervention incorporates (e.g., providing explanations in simple, direct language; modeling efficient solution strategies instead of expecting students to discover strategies on their own; providing practice so

Exhibit 6. Lexia Lesson Example: Practice

	lause Combining Read each pair of independent clauses clauses and make a complex sentence, dependent clause in your complex sen	with proper capitalization and pun	ctuation. Underline the
	Independent Clause 1	Independent Clause 2	Subordinating Conjunction
	Mary washed her truck	she drove it through the mud	after
	Mary washed her truck afte	r she drove it through th	e mud.
2.	let's go back to the movie theater	they make delicious popcorn	where
	Cody still couldn't swim	he had lots of practice	after
	Damon went to the nurse	he was sick	because
	we can't move the boat	we don't have a paddle	as

that students use the strategies to generate many correct responses; and incorporating systematic cumulative review). Additional information can be found within the NCII <u>Explicit</u> Instruction course content materials.

Dimension: Model Efficient Strategies

Activity 1. In the online component of *PowerUp*, strategies are directly taught and modeled using both visual and audio support. Students are not expected to discover strategies in the absence of direct instruction and modelling. This explicit modeling of strategies uses brief and concise demonstrations, with simple and efficient steps.

Activity 2. The program integrates the explicit online activities with teacher-led, face-to-face lessons that provide scripted language and examples for educators to model target skills and strategies. (See the Instruct and Practice sections of any Lexia Lesson [Exhibit 7] for examples of how the scripts model strategies.)

PREPARE

CONCEPT Knowledge of articles can help students find the nouns in a sentence. An article signals that a noun is coming. The articles are *a*, *an*, and *the*. A and *an* are used to refer to a nonspecific noun; the article *an* is used before a noun that begins with a vowel sound, and the

article a is used before a noun that begins with a consonant sound. The article *the* is used to refer to a specific noun.

VOCABULARY article, noun

MATERIALS Lesson reproducibles

INSTRUCT

ANCHOR CHART [Display Reproducible page 1.]

- Introduce the Concept of this lesson, (See above.)
- Review the definition of nouns (name a person, place, thing, or idea), and note that articles signal a noun is coming.
- Review examples of articles on the Anchor Chart. Note that some students may need a quick reminder of the difference between vowel and consonant sounds. (Vowel sounds are usually shown with letters a, i, o, u and are usually the parts of words and syllables in which your mouth is open.) Explain that understanding differences between how consonants and vowels sound helps to differentiate between the use of a and an.

PRACTICE

[Display Reproducible page 2, Find the Articles, Part A.]

- Read the directions with students.
- Review the definition of a noun, and guide students through the example, emphasizing the articles as you read them aloud.
- As students annotate each sentence, prompt as needed. (What signals that a noun is coming? What noun does the article refer to?)

[Display Reproducible page 2, Which One? Part B.]

- Read the directions with students.
- Review the definition of an article, and guide students through the example, using the picture clues to determine if it is a specific noun that is being shown (that one) or a nonspecific noun (any one will do).
- As students circle their answer, prompt as needed. (What article did you choose? Can you read the sentence aloud and emphasize the article you circled?)

[Display Reproducible page 3, Article Exceptions, Part C.]

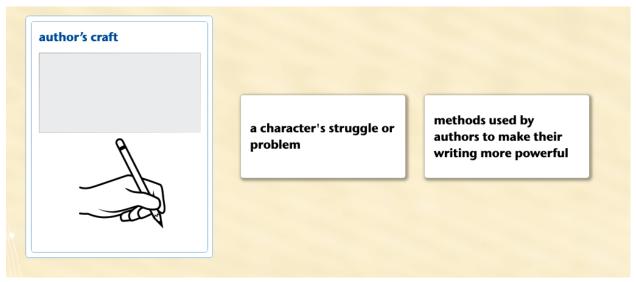
- Read the directions with students. (Note that Article Exceptions are not covered online and will be new content for most students, particularly non-native English speakers.)
- Review the information in the charts about Article Exceptions. Note that sometimes words that
 begin with consonants may use an instead of a and words that begin with vowels may use a.
 Remind students to listen to how the letter sounds. Guide students through each part of the
 question, and assist them in determining which article is used.
- Prompt students as needed. (How does the word sound when I say it? Does it sound like a vowel
 or a consonant?)
- ★ Note that an Answer Key is available for teacher reference on Lesson page 3.

Lesson page 1

Dimension: Ensure That Students Have the Necessary Background Knowledge and Skills to Succeed With Strategies

Activity 1: The Comprehension strand of *PowerUp* follows a thematic unit design that simultaneously activates and builds up background knowledge. Comprehension also includes introductory videos, instructional terms, and clickable words in the passages (Exhibit 8).

Exhibit 8. Comprehension Strand Example



Activity 2. Lexia Lessons strategically support educators to continuously anchor instruction in meaningful connections to background knowledge, particularly knowledge related to relevant skills and strategies. The beginning of the Instruct section of the lesson prompts educators to connect the topic to previously learned concepts.

Dimension: Gradually Fade Support for Students' Correct Execution of Strategies

Activity 1. Students who demonstrate difficulty online receive immediate corrective feedback and a scaffolding system for support that includes more structure and explicit instruction. As students persist through the online activities and correctly execute the target strategies, they must apply the skill or concept independently with minimal support to advance to subsequent units.

Dimension: Provide Practice So That Students Use Strategies to Generate Many Correct Responses

Activity 1. In the online program, each activity is focused on a particular reading skill and has anywhere from four to 16 units, each of which has between two and 20 questions.

Activity 2. Online opportunities to generate correct responses are coupled with offline practice opportunities in Lexia Skill Builders. After completing an activity in *PowerUp*'s online program, students work on a corresponding Lexia Skill Builder that allows them to review and practice the material, building automaticity and promoting generalization through additional opportunities to generate correct responses.

Dimension: Incorporate Systematic Cumulative Review

Activity 1. *PowerUp*'s overall scope and sequence (Exhibit 9) is designed to introduce strategies and skills systematically, moving from simple to complex and cycling back to review material previously introduced.

Exhibit 9. *PowerUp* Scope and Sequence

5011	prene	ension			
Zone	Level	Activity 1	Activity 2	Activity 3	Activity 4
	1	Building Knowledge	Building Knowledge	Building Knowledge	Building Knowledge
		The Trans-Alaska Pipeline (I)	Sliding Ice (I)	Swimming Upstream (I)	A Hero (I)
		Building Knowledge	Building Knowledge	Building Knowledge	Building Knowledge
(-2)	2	Exploring Beyond the Sea (I)	Ancient Sports (I)	Watch Your Head! (I)	Breaking Records (I)
٦ ٦		Building Knowledge	Building Knowledge	Building Knowledge	Building Knowledge
FOUNDATIONAL (K-2)	3	Growing Pains (I)	Setting Out (I)	Setting In (I)	Connecting the Coasts (I)
ATIC .		Building Knowledge	Building Knowledge	Building Knowledge	Building Knowledge
N	4	Progress Brings Change (I)	Tragedy at Sea (I)	YUM! (I)	You're a Hero, Jessica Watson! (I)
FO		Informational Text Elements	Narrative Text Elements	Informational Text Elements	Narrative Text Elements
	5	A Common Food (I)	Babysitting (N)	Building with Plastic Bottles (I)	The Statue (N)
		Narrative Text Elements	Informational Text Elements	Narrative Text Elements	Informational Text Elements
	6	Two Sisters (N)	Birds of Paradise (I)	Anansi and Common Sense (N)	The Eiffel Tower (I)
		Informational Text & Summary	Narrative Text	Drama	Biography
	7	Eight-Eyed Hunter (I)	Back in Time (N)	Pandora's Box (D)	Althea Gibson 1 (I)
		They're Alive (I)	Nobody's Fool (N)	Robots (D)	Troublemaker (I)
		Compare & Contrast	Cause & Effect	Making Inferences	Characterization
	8	Mastodons & Mammoths (I)	Titanic (I)	Take a Hint, Please! (D)	Legend of William Tell (N)
		Mermaids (I)	Disease at Sea (I)	Thirty Seconds (D)	The Choice (N)
-5)		Theme	Sensory Language	Figurative Language	Tone & Mood
E (3	9	The Thief and the King (N)	Churros and Hot Chocolate (N)	On the Platform (P)	Ocean View (N)
LAIC .		Thinkor Sink (N)	Heat Wave (P)	Fireflies (P)	The Rose That Grew (P)
INTERMEDIATE (3-		Conflict	Irony & Narrative Structure	Persuasive Techniques	Argument
TER	10	Decision (N)	Shepherd and Ogre (N)	The Way Ahead (I)	Lights Out (I)
Z ,		Avalanche (N)	Man, Boy, Donkey (N)	Peasley Animal Shelter (I)	A Carless City Center (I)
		Informational Text & Summary	Making Inferences	Sensory Language	Biography
	11	NASA: Space Shuttle (I)	Eleven 1 (N)	Hatchet 1 (N)	Roberto Clemente (I)
		Skydiving Spiders (I)	Eleven 2 (N)	Hatchet 2 (N)	Major Taylor (I)
	12	Figurative Language Basketball Forecast (P)	Theme Wonder 1 (N)	Cause & Effect Remember (I)	The Diary of Anne Frank 1 (D)
	12	Percussion Blues (P)	Wonder 2 (N)	Terror (I)	The Diary of Anne Frank 2 (D)
		Persuasive Techniques	Characterization	Irony & Narrative Structure	Compare & Contrast
	13	UN Speech, Malala 1 (I)	After Twenty Years 1 (N)	The Dinner Party (N)	From Feet to Wheels (I)
		UN Speech, Malala 2 (I)	After Twenty Years 2 (N)	The Last Leaf (N)	Cost of Freedom (I)
_ '	14	Argument	Tone & Mood	Conflict	Theme
[8-9]		No Limits (I)	Oranges (P)	The Outsiders 1 (N)	The Outsiders 3 (N)
ED (Later Start Time (I)	Hope (P)	The Outsiders 2 (N)	The Outsiders 4 (N)
ADVANCED (6-	15	Compare & Contrast	Argument	Tone & Mood	Informational Text & Summary
DV		Postal Pack 1 (I)	Losing is Good (I)	Harlem (P)	Civic Responsibility (I)
A		Postal Pack 2 (I)	Longer Day (I)	Dreams (P)	Marvels of Construction (I)
		Analysis & Evaluation of 2 texts	Analysis & Evaluation of 2 texts	Analysis & Evaluation of 2 texts	Analysis & Evaluation of 2 texts

Taxonomy Dimension: Behavioral Support

Behavioral support addresses the extent to which the program incorporates (a) self-regulation and executive function components and (b) behavioral principles to minimize undesired behavior. Additional information can be found within the NCII behavioral support course content.

Activity 1. The student dashboard (Exhibit 10)—what students see when they sign into or out of the program—helps students manage their learning goals, monitor their progress, and develop time management skills. Specifically, the dashboard allows students to view their weekly usage and progress so that they can monitor the number of minutes spent in the program and the number of units completed.

Exhibit 10. Student Dashboard



Activity 2. The activity screen—what students see when they interact with a learning task—offers further support for planning and progress monitoring toward goals. Specifically, students have two alternatives for monitoring progress within a unit: (a) The green progress bar displays how much of the unit has been completed; and (b) the blue progress bar shows how many units overall the student has completed for the particular activity. See Exhibit 11 for an example of Progress Monitoring (Comprehension, Level 9, Activity 4, Unit 11).

Exhibit 11. Example Activity Screen



Activity 3. *PowerUp* achievement certificates (Exhibit 12) are designed to provide an opportunity to celebrate student progress and achievement when students complete a level. These

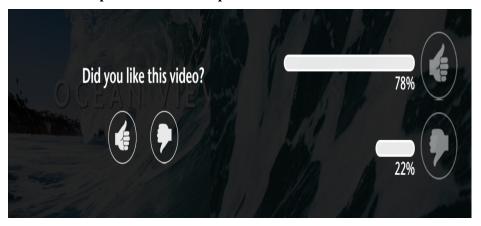
printable certificates provide space for educators to fill in the student's specific achievement and can be posted at school to promote community-recognition of these developed competencies.

Exhibit 12. Achievement Certificate Example



Activity 4. Opportunities for open-ended engagement questions and polls allow students to express their preferences and points of view. See Exhibit 13 for an example Opinion Poll (Comprehension Level 9, Activity 4, Unit 3).

Exhibit 13. Opinion Poll Example



Activity 5. Through friendly classroom competition to earn the most streaks, students remain engaged with the program and can interact with one another. Selecting a thumbs-up or thumbs-down after viewing a video or responding to an opinion poll also enhances engagement and connects students to their peers.

