An introductory guide for middle school teachers to get started using SERP’s original interdisciplinary academic language program

The original Word Generation program (WordGen Weekly) is a supplementary curricular resource that offers a series of discussable dilemmas designed to promote students’ academic language and argumentation skills. WordGen Weekly creates the opportunity for students to become familiar with current issues and persistent dilemmas, while acquiring skills prioritized in the 21st century learning standards. The program is unique in its cross-disciplinary design, giving teachers of ELA, science, social studies, and math the chance to collaborate on the shared goal of helping students use academic language to articulate their thinking. Series (or individual units) can be used school-wide in grades 6–8.

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So much more than a vocabulary program!

WordGen Weekly:

▶ Builds the **reasoning and argumentation** skills that are necessary for learning in all content areas.

▶ Builds **reading comprehension** and content-area literacy by providing students with motivating text, **opportunities for discussion and debate, and weekly writing**.

▶ Sets students on a path to **college and career readiness** by providing multiple perspectives on complex problems, and requiring that students **sift through evidence** that supports or contradicts particular perspectives.

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**How WordGen WEEKLY Works**

**Daily instructional activities designed to build the vocabulary of middle school students through repeated exposure to academic words in various contexts**

- Three “series” (years) of materials, with 24 one-week units per series
- Series/units can be used in any order
- Units focus on a social or civic dilemma
- Five connected 15–20 minute activities for ELA, math, science, and social studies
- Five academic “focus words” emphasized per week
Many state laws require that high school students pass a standardized test to graduate. These laws are passed to make sure high schools challenge their students. Businesses often complain that high school graduates cannot read and do math needed on the job. Colleges worry that not all high school graduates can do college work. The tests are used to see who has the skills expected by employers and colleges.

Standardized tests assess students' ability to write, read critically, and do challenging math. The tests are geared to the skills people need in jobs and in college. Supporters say standardized testing is fair because all students are graded using the same criteria. For example, writing might be graded by how many examples the students give.

Some people think graduation tests are unfair to students who are learning English. These students might know the information but have trouble understanding the test questions. Other students might have trouble focusing their attention. Their test scores might not show what they really know.

Students in different schools learn different things. The standardized test might not correspond to what some students were taught in a particular school. Students in another school, however, might find the test matched what they learned in class, which some people argue isn't fair. Some people also worry that standardized tests make teachers just cover what is on the test. Teachers might not formulate lessons that will be interesting to their students.

Other people think that standardized testing is valuable, but that there should be different ways for students to show that they are ready to graduate.

Do standardized tests hold all students to high standards? Or do they unfairly keep some students from graduating?

Launch This Week’s Issue
(Usually led by ELA teacher)

1. Introduce the topic of the week, providing students the opportunity to discuss their perspectives with a partner.

2. Read or have volunteers read the passage aloud, stopping to discuss the passage. Examples of questions for classroom discussion are noted on the launch passage of each unit.

Teaching tip: Many WordGen Weekly topics are highly controversial. It is important to establish discussion norms to hold students accountable for respectful, equitable, and productive discussions.

Resources on establishing norms are available on the WordGen website.

3. Discuss the various positions presented in the passage. Encourage students to begin developing a claim, an arguable statement about the topic.

Teaching tip: Explain to students that the lessons present information that can be used to argue both for and against particular claims. Also, each day’s lesson adds a bit more information, so it is important to participate in all the activities.

Instructional Considerations:
✓ Model fluent reading of the passage by having the teacher or a fluent reader read the passage while the class follows along.
✓ Model reading and thinking strategies in context. Encourage the use of highlighters or sticky notes to annotate the text.
Standardized (adjective) the same for everyone

Sample Sentence: In many states, high school students must pass a standardized test to graduate.

Assess (verb) to judge the quality of; to evaluate

Sample Sentence: Many tests assess students’ ability to write, read critically, and do challenging math.

Criteria (noun) standards or rules used to make a decision

Sample Sentence: Keisha met all the criteria in her math class and earned an ’A’ for the semester.

Correspond (verb) to match

Sample Sentence: Standardized tests might not correspond to what some students were taught in a particular school.

Formulate (verb) to invent by thinking about

Sample Sentence: Each year testing companies formulate new exams.

Turn and Talk Format encourages students to deepen their understanding of the unit focus words through discussion.

Instructional Considerations:

✓ Make word learning fun! Recognize students who use the focus words during and outside of class time.

✓ Encourage students to acknowledge the focus words throughout their daily discussions.

✓ Creatively display the focus words on a word wall. Display the current words on an active word wall and retire the previously used words to a designated location in the room where students can reference previously taught words throughout the year.

✓ Encourage experimentation with the words and use mistakes as teachable moments.

Use the Focus Words (Usually led by ELA teacher)

4. Introduce the unit focus words by displaying each word, reading each word aloud, and having students repeat each word.

Teaching tip: Establish a routine to introduce and review the focus words.

5. Build students’ understanding of the focus words using the definitions, sample sentences, and Turn and Talk prompts.

Teaching tip: Throughout the week, teachers can use this page as a reference and/or for review.

Resources for effective strategies for vocabulary instruction, including vocabulary cards, are available on the WordGen website.
DO THE MATH

We want high school graduates to meet important criteria. They should read well. They should formulate ideas logically and express them clearly. They should understand basic ideas about math, science, and social studies. What is the best way to assess whether students meet these criteria? Is a standardized graduation test too harsh? In Massachusetts in 2010, several thousand students failed to graduate because they failed one or more of the state tests.

Option 1: Of the 69,008 Massachusetts 2010 high school seniors, 2,556 failed the MCAS math exam. Which answer corresponds to the percentage of the class that failed the exam?

A. about 2.4%
B. about 3.7%
C. about 4.1%
D. about 6.7%

Option 2: Under a Massachusetts state rule, students must pass all three MCAS exams to graduate: the Science exam, the English exam, and the Math exam.

Of the 69,008 Massachusetts high school seniors in 2010:
- 1,958 failed the English MCAS
- 2,556 failed the Math MCAS
- 2,933 failed the Science MCAS

a. Based on these numbers, what is the smallest possible number of students who could not graduate because of the tests? (Hint: Remember that students who failed the Science exam also failed the English and Math exams and thus are already counted.)

Smallest possible number: 2,933. This assumes that the students who failed the Science exam also failed the English and Math exams and thus are already counted.

b. Based on these numbers, what is the largest possible number of students who could not graduate because of the tests? (Hint: Remember that each student could have failed only one exam, so the amounts could not overlap at all.)

Largest possible number: 7,447. This assumes that each student failed only one exam, so the number of students prevented from graduating is the sum of the three categories.

Discussion Question: Standardized tests must change each year to prevent cheating. Each year testing companies formulate new exams. Teachers and experts review each question. A good exam question meets these criteria: it corresponds to what students should be learning in class, and it fairly assesses what students know. These carefully prepared exams are expensive. For example, the state of Massachusetts spends $35 million each year on making its standardized test. Is this a good use of state money? Why or why not?

Math lessons offer selected and open-ended response questions.

Real-world math problems are related to the weekly topic.

Discussion questions accompany each math lesson. This allows the teacher to connect the math activity to the topic, tap into students’ beliefs about the week’s topic, and provide an opportunity to explicitly use the focus words.

Instructional Considerations:

✓ If the math problems are out of reach for your students, discuss and solve Option 1 as a class or in groups. Problems can also be used to demonstrate the proper use of problem solving strategies.

✓ The lesson is designed to take 15–20 minutes; however, class discussions can prolong the lessons. Some teachers use timers to streamline instructional procedures and routines in WordGen Weekly classrooms.

✓ The discussion questions at the end of the lesson provide a format for connecting the math activity to the topic, explicitly using the focus words, and tapping into students’ beliefs.

✓ Encourage students to use the focus words in the discussion and use mistakes as teachable moments.

Do the Math
(Usually led by math teacher)

1. Review the focus words.

Teaching tip: Ask students to think about and explain how the focus words can be used in a math classroom.

2. Read and solve the math problem(s) that relate to the weekly topic. Option 1 usually involves a simple operation presented in a selected response format. Option 2 is an open-ended response question and is typically more challenging for students.

Teaching tip: Students may work in pairs or groups to encourage discussion about the math problem.

3. Facilitate a class discussion using the discussion question at the end of the lesson.
The students in Mr. Seemy’s class are going to high school next year, and some of them are concerned about taking the new high school exit exam. The class is debating whether passing a standardized test should be required for students to get a high school diploma.

Camila and Josef think an exit exam is a great idea and are happy about the new test. “We need strict criteria to figure out who should get to graduate,” says Josef. Camila agrees with Josef and adds, “How can we be sure that students deserve a high school diploma unless we assess what they know?”

Malik isn’t so sure. He says, “I don’t think a standardized test is the right way to go. What about kids who take all the right classes and get good grades but still don’t pass the test? And what about teachers who feel they should teach only the skills that correspond to the test?”

“You’re raising the issue of high-stakes testing,” says Mr. Seemy. “You’re beginning to formulate a hypothesis about the effect exit exams will have.”

Malik thinks for a moment. “I bet a lot of kids would drop out of school if they had to take a test. My hypothesis is that more kids will drop out of high school in states that have exit exams like ours.”

In 2006, the states in this data set began withholding diplomas from students who didn’t pass exit exams. Did dropout rates increase starting in 2006 or thereafter? Cite specific information from the data table.

**Question:** Do standardized high school exit exams affect dropout rates?

**Malik’s Hypothesis:** States that have exit exam requirements will have higher dropout rates after requiring students to pass an exit exam.

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<th>California</th>
<th>Idaho</th>
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<tr>
<td>2008</td>
<td>6.7</td>
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</tbody>
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Malik, Camila and Josef were very interested and found information on the internet about high school dropout rates in the U.S. They selected three states that recently started to require exit exams and studied the data.

In 2006, the states in this data set began withholding diplomas from students who didn’t pass exit exams. Did dropout rates increase starting in 2006 or thereafter? Cite specific information from the data table.

When the rule was implemented in 2006, dropout rates increased in Arizona and California and slightly decreased in Idaho. The next year, dropout rates increased again in California, decreased again in Idaho, and remained the same in Arizona. Dropout rates fell in all three states in 2008, although the dropout rates in Arizona and California were still higher than they had been before 2006.

**Was Malik’s hypothesis supported by the data or not?** Cite specific evidence that supports your conclusion.

Opportunities for discussion and writing encourage scientific thinking while exploring the weekly topic.

**Instructional Considerations:**

- The lesson is designed to take 15–20 minutes; however, class discussions can prolong the lessons. Some teachers use timers to streamline instructional procedures and routines in WordGen Weekly classrooms.
- Encourage students to make connections between the weekly topic and the data in the science experiment.
- Encourage students to use the focus words in the discussion and use mistakes as teachable moments.
Debate the Issue
(Usually led by social studies teacher)

1. Review the focus words.
2. Review the discussion norms.

Teaching tip: In the early weeks and months, reviewing discussion norms is likely to be required routinely. Over time students will internalize the norms.

3. Review the debate question and the positions.
4. Let teams pick a position, or assign positions if necessary to ensure both sides are represented.
5. Give each team a few minutes to develop their claim, accumulate evidence supporting or countering their position, explain their reasoning about the connections, and take notes in preparation for the debate.

6. Select a debate format and explain the procedure to students.

Debate resources are available on the WordGen website.

7. Debate the issue!

Rubrics for discussion and debate are available on the WordGen website.

Instructional Considerations:

☑ Debates in WordGen Weekly are planned classroom activities in which particular claims are discussed, and students plan together to present and defend their claim. The purpose is not winning or losing the debate; the purpose is to develop students’ abilities to think through a set of claims or arguments in order to deepen their understanding and enhance their ability to learn.

☑ Many teachers create debate organizers or provide chart paper for students to write their arguments. This can serve as a pre-writing activity for the “take a stand” essay the next day.

☑ Discussion norms should be established early on to encourage student engagement and to make the class environment a safe place to discuss freely and to debate ideas. Some teachers have students participate in setting norms. At a minimum, discussion norms should establish expectations for respectful disagreement and establish practices that allow all students to participate. Post norms in the classroom as a reminder.

☑ During the debate, encourage students to share, clarify, and expand their thoughts using academically productive talk, and to listen and respond to the ideas of others.
TAKE A STAND
(Usually led by ELA teacher)

1. Review the displayed focus words.

2. Introduce the writing assignment.

   Teaching tip: Students should use evidence to support their written argument. Possible sources of evidence are the launch passage, math activity, science activity, and debate.

3. Students write an essay taking a stand on the issue.

Instructional Considerations:

✓ The writing assignments can change throughout the year based on the needs of your students. Teachers have used WordGen Weekly writing assignments as quick-writes, free-writes, information pieces, letters, and argumentative writing pieces. The main goal of the writing assignment is for students to make a claim and justify that claim with evidence from the text using academic language.

※ A rubric for argumentative writing can be found on the WordGen website.
More resources available online! wordgen.serpmedia.org

› Download Center for Students
  Students can access individual units for free (no registration necessary).

› Download Center for Teachers (simple registration required)
  Teachers can access student materials and teacher editions for free. Both color and grayscale PDFs available.

› Teacher Resources
  □ Focus word vocabulary cards
  □ Information about academic language and vocabulary instruction
  □ Vocabulary assessments
  □ Activities to develop discussion and debate in the classroom
  □ Rubrics for discussion, debate, and argumentative writing
  □ Professional learning opportunities
  □ Interviews with the developers of the program
  □ Videos of Word Generation classrooms
  □ Topic lists
  □ Focus word lists

Much more!