Implementing an Enriched Language Development Program for Learning Support Students

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Implementing an Enriched Language Development Program for Learning Support Students

Abstract: This article describes how middle school students who qualified for learning support performed in an enhanced language development program known as Word Generation (WG). Word Generation is a cross-curricular language development program designed to improve students’ overall literacy skills by focusing on deepening students’ knowledge of academic language. This study was guided by the following question: Does an enhanced language development program influence students’ vocabulary learning and broader literacy skills? Students demonstrated statistically significant positive differences on the pretest/posttest vocabulary knowledge assessment and maintained that learning on a delayed posttest. Engagement with the WG materials positively influenced students’ abilities to interact with complex texts, engage in effective discussions, and construct influential argumentative essays. The findings show promise for incorporating multifaceted vocabulary instruction such as Word Generation into middle school classrooms with students who struggle with reading.

Background

This is my ninth year of teaching and I have taught a scripted, remedial language curriculum for the past four years in a reading support classroom. The majority of my students receive special education services and perform well below their peers on reading assessments and universal reading screeners. I have closely observed how the prescribed reading curriculum fails my students. For example, students demonstrate minimal growth on grade-level state assessments. They exhibit a marked lack of enthusiasm, interest, and engagement with the activities that never vary and leave no room for student choice or agency. Also, as a reading specialist, I recognize that the curriculum emphasizes the teaching and mastery of discrete skills rather than engaging students in holistic literacy learning incorporating oral language and vocabulary development, comprehension, and writing. In other words, the curriculum provides my students with few opportunities to engage in critical thinking, discussion, and writing activities centered on complex, grade-level texts. Research shows that unequal access to complex, grade-level texts contributes to widening the reading and knowledge gap (Robertson, Dougherty, Ford-Connors, & Paratore, 2014). Furthermore, the prescribed curriculum lacks coherence across students’ academic day. This is concerning since research suggests that one way to build motivation and transfer of skills is to ensure that instruction occurring throughout the day and outside of the classroom (e.g., by a reading specialist) are congruent (Robertson et al., 2014). Thus, while the prescribed curriculum addressed specific reading skills; it did not move students
towards becoming **critical** readers and knowledgeable learners. I expected the WG curriculum to address these issues. Furthermore, a recent review of features of literacy programs teaching students in support settings by Reutzel and Smith (2004) emphasized the importance of engaging students in integrated literacy approaches that also focus on motivation and engagement (e.g., Ryan & Patrick 2001).

The shortcomings of the curriculum I was using became the problem of practice that I decided to address in my dissertation research. I set out to investigate other resources, specifically resources that would be motivating to upper elementary students and that would engage them in meaningful literacy learning. My advisor suggested Word Generation (WG). My review of these resources revealed a rich literacy program integrating speaking, listening, reading, and writing. The integrated approach as well as the engaging topics (described below) convinced me that they were worth implementing. The WG resources are reflective of an enhanced language development program aimed at improving students’ vocabulary learning and broader literacy skills. I described my plan to use WG to my principal. I built a case for implementing WG by noting the stark differences between the WG approach and the prescribed curriculum. I also expressed my expectations that the WG curriculum would positively impact students’ reading skills and learning as well as their motivation for reading and learning.

**Literature Review**

In the sections that follow, we describe the theoretical perspectives that influenced our decision to implement Word Generation with my learning support students. The perspectives related to vocabulary development include the Reading Systems Framework (Perfetti & Stafura, 2014) and the Lexical Quality Hypothesis (LQH) (Perfetti, 2007). Other perspectives relate to the importance of integrated literacy approaches and the importance of motivation and engagement in literacy development.

The Reading Systems Framework (Perfetti & Stafura, 2014) emphasizes the central role of a reader’s lexicon, or mental dictionary, in reading. Perfetti and Stafura identify three main processes involved in reading. The first is word identification, which involves decoding or mapping letters to the sounds they represent. The outcome of this process is pronouncing a word. The second process is accessing word meaning. Word meanings are stored in the mental lexicon, or dictionary, that serves as the central connection between word identification and comprehension, the third process. When readers understand the meanings of words in text, they are able to engage in using those meanings to build a representation of the ideas in a text.
The features of optimal entries in a reader’s mental lexicon have been described by Perfetti’s Lexical Quality Hypothesis (2007). Those features include phonology, orthography, morphology, syntax, and semantics. Readers need to know how to pronounce words (phonology) and recognize them in print (orthography). Furthermore, readers need to understand how words function in sentences and how specific word forms can signal their syntax. That is, different forms of words can function as nouns, verbs, adjectives, or adverbs (e.g., suspense, suspend, suspenseful, suspensefully). Likewise, readers need to be able to identify meaningful word parts such as affixes and inflectional endings (morphology). And knowledge of all these features enhances the meaning representation of words (semantics) in a reader’s lexicon. Vocabulary instruction that focuses on supporting students in developing high-quality lexical representations as outlined by the LQH needs to be systematic and deliberate. The goal of such instruction is flexible access to word meanings in multiple contexts (i.e., across academic domains). Word Generation addresses this goal.

**Word Selection**

The selection of the words to teach is an important feature of effective vocabulary instruction. Beck, McKeown, and Kucan (2013) suggest selecting words representative of mature language users and found across domains. The authors designed a three-tier framework to define the words worthy of instructional focus. Tier One words are basic words frequently heard in oral conversations. Most school-aged students have had multiple encounters with these words from a young age. Thus, Tier One words rarely are selected for instructional focus. Tier Three words are domain-specific words that are isolated to a content area (e.g., science and social studies). Tier Three words are infrequently encountered and are best learned for a specific need versus wide-learning. Therefore, Tier Three words receive minimal instructional focus. Conversely, Tier Two words appear across a number of academic content areas and knowing them can promote comprehending discipline-specific texts as well as general texts. Tier Two words are frequently found in written texts rather than in oral conversations. Thus, these words are less familiar to students and require greater instructional focus in order to increase students’ experiences and exposures with such words. Beck et al. (2013) argue that Tier Two words can significantly contribute to students’ language repertoire, rich knowledge of words, and verbal functioning.

**Integrated Literacy Approaches**

Greenwald and Schelino (2017) wrote on their blog, “Imagine being at a party where the food, the drinks, the music, and the room to mingle were each in a separate location. You probably wouldn’t really appreciate any of the individual
parts as much if you had to keep switching gears from one to the other” (para. 1). This quote represents the situation of engaging students in learning experiences that focus on the teaching and mastery of discrete skills or strategies. Unfortunately, the literacy instruction of adolescent students who struggle with reading is dominated by scripted, one-size-fits-all programs. This is concerning since these programs often result in a mismatch between students’ learning needs and the instruction they receive (Pitcher, Martinez, Dicembre, Fewster, & McCormick, 2010). Alverman (2003) suggested that educators need to stop trying to “fix” students by finding a “magic bullet” (p. 2) and instead focus on addressing the learning conditions required to meet students’ instructional needs. Reutzel and Smith (2004) also suggested that drill to mastery may result in undesirable, long-term effects on struggling readers’ growth and motivation.

From this perspective, a more effective approach is to engage students in integrated literacy instruction. This form of instruction is more authentic and reflective of real-world tasks instead of those designed specifically for schooling (Gavelek, Raphael, Biondo, & Wang, 2000). Morrow, Pressley, Smith, and Smith (1997) argued that an integrated approach may allow students to recognize how what they are learning in one domain can transfer to another. The ability for students to explore concepts or skills in multiple contexts allows for broader skill application and the development of a greater conceptual understanding of the world (Greenwald & Schelino, 2017). Integrated literacy instruction also emphasizes learning that extends beyond school by connecting the curriculum to students’ communities and homes (Gavelek et al., 2000). Furthermore, integrated literacy instruction incorporates broad literacy skills (i.e., reading, writing, listening, speaking, and viewing) as students explore interesting problems or topics (Gavelek et al., 2000). Thus, integrated literacy instruction emphasizes the interconnectedness among literacy skills as well as their application to multiple academic domains and the world. In short, an integrated approach to literacy allows students to engage in meaningful reading tasks that extends their learning beyond mastery of discrete skills by promoting broader, conceptual learning.

**Motivation and Engagement**

A wide range of terminology has been used to define engaged reading; however, researchers agree that engaged reading is “strategic and conceptual as well as motivated and intentional” (Guthrie & Wigfield, p. 404, 2000). Thus, Guthrie and Wigfield (2000) defined motivation as a student’s interest, persistence, and willingness to engage in literate activities.
Engaged readers possess the following characteristics: (a) motivated to read for personal goals, (b) purposefully apply multiple strategies to comprehend, (c) construct new knowledge from text, and (d) approach literacy from a social perspective. By contrast, disengaged readers are inactive, avoid reading, and exert minimal effort. Disengaged readers rarely choose to read during their free time (Guthrie & Wigfield, 2000). Engagement and achievement are closely connected. Campbell, Voelkl, and Donahue (1997) found that more highly engaged readers demonstrated higher achievement than less engaged readers. They also found that “middle school students who were engaged in reading achieved as highly as students who were less engaged in reading but had 4 more years of schooling” (Guthrie & Wigfield, p. 404, 2000). In other words, engaged readers can independently acquire knowledge from text that is equivalent to several years of education (Guthrie & Wigfield, 2000). This finding emphasizes the importance of motivating less engaged readers in order to help close both the reading and knowledge gap (Robertson et al., 2014).

Guthrie and Wigfield (2000) argued that motivation is imperative to engagement since motivation activates behavior. In short, an unmotivated student will become a disengaged student. Recognizing this, educators must strategically design instruction to motivate all learners. Research suggests the following tasks positively influence student engagement: (a) authenticity, (b) collaboration, (c) student-choice, (d) appropriate challenge, and (e) sustained learning (Parsons, Malloy, Parsons, & Burrowbridge, 2015).

Authentic tasks are engaging since they have a real purpose and reflect activities that occur outside of school settings (Duke, Purcell-Gates, Hall, & Tower, 2006). Collaborative activities allow students to socially interact with their peers and teachers during the learning process. Perry, Phillips and Dowler (2004) argued that collaborative activities positively influence students’ “understanding, confidence, and regulation of learning” (p. 1873). Student choice or autonomy focuses on greater student control through choice. Guthrie (2000) argued that choice is motivating, because “children seek to be in control of their environment, rather than being manipulated by powerful others” (p.411). A reciprocal relationship exists between autonomy and student motivation. Students’ effort and commitment to learning increases when they believe their teacher affords them genuine choices (Guthrie, 2000). Appropriately challenging tasks are neither too difficult nor too easy (Parsons et al, 2015). In other words, appropriately challenging tasks are slightly beyond a learner’s current competency level, which has been found to be motivating (Pressley & Allington, 2015). Sustained learning activities occur over a period of time and help to improve student engagement (Guthrie, 2015).
Word Generation Resources

Snow, Lawrence, and White (2009) designed Word Generation (WG) for implementation in urban middle schools as a cross-content vocabulary intervention. Each week the five all-purpose academic words were taught across the academic subjects including English Language Arts, math, science and social studies. The daily activities promoted oral discussion and debate on 4 days of the week, and writing on the fifth. On Monday, the five all-purpose academic words were introduced through a brief text centered on a controversial issue. The introduction of the target words included student-friendly, content-related definitions. The introduction activities occurred within the English Language Arts classroom. On Tuesday, Wednesday, and Thursday, the math, social studies and science teachers provided instruction on the five all-purpose words as they related to each academic subject. On Friday, the students wrote an essay to articulate their stance on the week’s controversial issue.

After implementation, the authors found that the students engaged in the program learned more of the targeted words than the students not in the program. Furthermore, the authors found that language minority students showed greater gains than their English-only peers (Snow et al., 2009).

Word Generation addresses research-based features of effective vocabulary instruction that include: (a) exposure to target words in semantically rich contexts, (b) multiple exposures to target words, (c) opportunities to use target words both orally and in writing, (d) explicit instruction of word meanings, and (e) explicit instruction focused on morphological analysis (Snow et al., 2009). For instance, the WG program and resources center on all-purpose academic words that are “widely used in academic discourse and across disciplines” (SERP, 2009). These high-utility academic words are taught using student-friendly definitions, which are defined through the WG vocabulary cards. Furthermore, the instructional plans and corresponding materials strategically incorporate target words from current and past units in order to ensure multiple exposures to the target words in various contexts. WG uses a text-based approach by incorporating the target words into multiple texts in a variety of genres.

Additionally, the program promotes engagement in structured discussions by centering units on controversial topics and integrating discussion questions (Turn and Talk) and debates. WG incorporates writing in the form of responses to questions as well as the composition of argumentative essays. Finally, the WG program emphasizes deep processing of words through word study charts that engage students in examining the morphological features of target words and
related word forms. Thus, each feature of WG was intentionally designed to reflect the theoretical perspectives and findings of current vocabulary, integrated literacy, and motivation and engagement research.

Methods

The purpose of the present study was to determine how Word Generation influences students’ vocabulary learning and broader literacy skills. Specifically, I wanted to explore how incorporating multifaceted vocabulary instruction influenced students’ oral language and vocabulary development, comprehension, and writing.

Participants

Nine sixth-grade students (five girls and four boys) from a middle school in a suburban district in southwestern Pennsylvania were the participants. Six qualified for and received special education services; one student was an English language learner. Informed consent was obtained from all participants.

Beyond demographics and statistics, the students within my classroom were learners reading one to two grade levels below their current grade. The majority were also learners who had been receiving reading support services since first or second grade. However, two male students “landed” in my reading support classroom merely due to poor scores on their fifth grade ELA state assessment. A commonality among the students was a noted frustration and aversion towards reading. Most of the students perceived themselves as poor readers. These perceptions were verbally shared by the students during discussions with myself and other students. Students’ perceptions of their reading ability may have attributed to their avoidance or disengagement with reading.

As an educator, I recognize that my job is to help all learners succeed regardless of the challenges they may face. I also recognize that my job is to equip students with the skills, motivation and attitude to successfully navigate these challenges. Thus, when students enter my room it is a room of acceptance and openness. Mistakes are welcomed. Struggles are viewed as windows to improvement and learning. This type of environment allows us to celebrate both failures and successes. In my experience, it is this type of environment that allows for the implementation of new curriculums and new ways of learning. Thus, the students and I embarked on this new path of learning to find that we both were motivated in ways we never imagined.

Procedures
I implemented the enhanced WG intervention for seven-weeks within my reading support classroom. I introduced students to the components of the Word Generation (WG) program using a series of introduction lessons, which established routines and expectations. The intervention followed a 10-day cycle that included a variety of whole-group, small-group, and independent activities designed to promote deep processing through multiple opportunities for listening, speaking, reading, and writing with the target words. Daily lessons were designed to take 40-50 minutes.

**Resources**

The WG resources include illustrated word cards, readings, writing and discussion prompts, and videos. We enhanced the WG resources by creating an additional, teacher-created word study chart as well as a Word Wizard incentive chart (Kucan, 2012). The word study charts focused on how words can change from one form to another. For example, *introduce* becomes *introduction*. The word study chart engaged students in identifying patterns of change in syntax (i.e., verb to noun) as well as orthographic changes (i.e., drop the final silent *e* and add the suffix *-tion*). Hence, the purpose was to guide students in discovering the patterns of English orthography as well as increasing their specific knowledge of words.

The Word Wizard tally chart served as a positive incentive aimed at encouraging students to become “word-conscious” learners. The chart listed student names beside an open area to record tally marks. Students earned tally marks by reporting the target words they heard or saw outside of the classroom and by explaining where and how the word was used.

**Daily Lessons**

Table 1 provides a description of each day in the instructional cycle. The WG resources described in Table 1 address the features of effective vocabulary instruction. For instance, the WG program centers on all-purpose academic words that are “widely used in academic discourse and across disciplines” (SERP, 2009). These high-utility academic words are taught using student-friendly definitions, which are defined through the WG vocabulary cards. Furthermore, the instructional plans and corresponding materials strategically incorporate target words from current and past units in order to ensure multiple exposures to the target words in various contexts. WG uses a text-based approach by incorporating the target words into multiple texts (i.e., Actions News script, Readers Theater, Hester’s journal; informational article).
<table>
<thead>
<tr>
<th>Day 1</th>
<th>Introduce Target Words.</th>
<th>Introduce the unit’s six target words using vocabulary cards &amp; scripted word chants.</th>
<th>Vocabulary Card Sets/Word Chants <a href="http://wordgen.serpmedia.org/t_elem.html">http://wordgen.serpmedia.org/t_elem.html</a></th>
<th>Cards contain photographs and student-friendly definitions. Word Chants: Say the target word; clap syllables; shout syllables; spell the word; say the target word two more times.</th>
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<tbody>
<tr>
<td></td>
<td>Discussion Question</td>
<td>Use the discussion question to further explore the unit’s topic.</td>
<td>Online Lesson Plans <a href="http://wordgen.serpmedia.org/t_elem.html">http://wordgen.serpmedia.org/t_elem.html</a></td>
<td>What groups in your community help people in need?</td>
</tr>
<tr>
<td>Day 2</td>
<td>Readers Theater</td>
<td>Model fluent reading. Students re-read.</td>
<td>Online Lesson Plans <a href="http://wordgen.serpmedia.org/t_elem.html">http://wordgen.serpmedia.org/t_elem.html</a></td>
<td>Four characters discuss what it means to belong to a community.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use definitions, Turn &amp; Talk, pictures, word forms, and fun word facts to build understanding of target words.</td>
<td>Word charts provided in online lesson plans <a href="http://wordgen.serpmedia.org/t_elem.html">http://wordgen.serpmedia.org/t_elem.html</a></td>
<td>To further understand the target word common, the Turn &amp; Talk question was, “What are some common punishments for misbehaving in school?”</td>
</tr>
<tr>
<td></td>
<td>Word Study Chart</td>
<td>Use teacher-created word study charts for exploring multiple forms of target words.</td>
<td>Use Words Their Way (Bear et al., 2015) as a resource for creating word study charts.</td>
<td>The chart may focus on verbs becoming nouns by changing word endings (e.g., migrate/migration).</td>
</tr>
<tr>
<td></td>
<td>Word Study: Multiple Forms</td>
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<tr>
<td>Day 4</td>
<td>Journeys &amp; Journals (Hester)</td>
<td>A journal entry written from the perspective of Hester, a fictional 10-year-old Puritan girl.</td>
<td>Journal entries and follow-up discussion and writing activities are included in online lesson plans (see link above).</td>
<td>Discussion question: “Why is Hester leaving her local community? How does Hester feel about leaving?”</td>
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<tr>
<td>Day 5</td>
<td>Article &amp; Discussion</td>
<td>Students read a non-fiction article that connects to Hester’s journal.</td>
<td>Articles and follow-up discussion and writing activities are included in online lesson plans (see link above).</td>
<td>Article entitled “Who Were the Puritans?” provides information about the Puritans and why they left England in the 1600s.</td>
</tr>
<tr>
<td></td>
<td>Quick True/False Assessment</td>
<td>Assess students’ knowledge of target words after five days of instruction.</td>
<td>Use Bringing Words to Life (Beck, McKeown, &amp; Kucan, 2013) as a resource to create vocabulary assessments.</td>
<td>To assess students’ knowledge of the target word global and its connected word forms you might ask, “If a company globalizes their business, it means that their business extends across the world.”</td>
</tr>
</tbody>
</table>
### Table 1 (continued)

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 6</td>
<td>Prepare to Debate</td>
<td>Debates center on controversial issues that align to the units’ topics. Framework and preparation built into the WG lesson plans. The students use the Readers Theater, connected articles, and discussion questions to help develop their opinions throughout each unit.</td>
</tr>
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<td></td>
<td></td>
<td>Students discuss the unit’s topic and determine their stance. Students sharing similar stances are place on a debate team. Students complete a graphic organizer. WG provides graphic organizers within the lesson plans, but it is recommended that you use a graphic organizer that explicitly outlines the components of a debate. In this study, the following components were included on the graphic organizer: (1) position, (2) three reasons to support your position, (3) two possible counterarguments, (4) two rebuttals, and (5) concluding statements.</td>
</tr>
<tr>
<td>Day 7</td>
<td>Debate</td>
<td>Holding the debate. In this study, debates were highly-structured and scaffolded by the teacher. The remaining three students served as judges. Debate Rubric: WG provides a debate rubric on the SERP website under the “Additional Resources” tab. This rubric assesses students’ arguments from ineffective to highly-effective.</td>
</tr>
<tr>
<td>Day 8</td>
<td>Critique Debates</td>
<td>Students watch the video recording of the debate from Day 7 and engage in a discussion to determine strengths and weaknesses of the debate. Ask questions that encourage students to discuss and evaluate the effectiveness of the debate. To start a discussion about the quality of the debate, you might ask the following questions: Did our class do a good job following the discussion norms? Were we able to use the focus words? Did everyone have a chance to participate?</td>
</tr>
<tr>
<td>Day 9</td>
<td>Prepare to Write</td>
<td>The video recording of the debate is played back for students. After viewing the debate, students discuss strengths and weaknesses of the debate. WG online lesson plans provide connected writing activities. However, you may choose to create your own connected writing activity such as an argumentative essay. For example, Unit 5.1, used these questions to guide students’ essays: Which school community (Manual or Dali) would you rather belong to? Why?</td>
</tr>
<tr>
<td>Day 10</td>
<td>Write</td>
<td>Students will create an argumentative essay that clearly states their position and three reasons to support their position. Students will be encouraged to use target words in their writings. Argumentative Writing Rubric: WG provides a rubric for assessing students’ argumentative writings. The rubric can be found on the SERP website under the “Additional Resources” tab. This rubric assesses writing on a scale of 1 to 4 and examines four different areas: (1) argument, (2) evidence, (3) organization, and (4) language.</td>
</tr>
<tr>
<td></td>
<td>Quick True/False Assessment</td>
<td>Assess students’ knowledge of target words after ten days of instruction. Use <em>Bringing Words to Life</em> (Beck, McKeown, &amp; Kucan, 2013) as a resource to create vocabulary assessments. For example, to assess students’ knowledge of the target word support and its connected word forms you might state, “A supportive person is helpful to others during difficult times.”</td>
</tr>
</tbody>
</table>
Additionally, the program promotes engagement in structured discussions by centering units on controversial topics and integrating discussion questions (i.e., Turn & Talk). The debate component also encourages discussion. WG incorporates writing in the form of responses to questions as well as the composition of argumentative essays. Finally, the WG program emphasizes deep processing of words through the word study charts. These charts examine the morphological features (i.e., polysemy, Greek/Latin roots, cognates, etc.) of target words and related word forms. Thus, each feature of WG was intentionally designed to reflect the theoretical perspectives and findings of current vocabulary research and is aimed at enhancing students’ broader literacy skills.

Data Sources and Analysis

Pretest, Posttest, Delayed Posttest

At the onset of the study, I administered a pretest with 48 multiple-choice questions that assessed students’ understanding of the 24 target words. Each target word was assessed with two items. For example, the word *motive* was assessed using the following two prompts/questions:

- Police have ruled out robbery as a motive for the killing. A motive is…
- What might someone who is trying to motivate you say?

Students were required to select one of the following answer choices for defining *motive*: (a) a feeling of strength or power, (b) a reason for doing something, (c) an excuse to behave badly, or (d) a way to make others feel determined. Similarly, students had to select one of the following phrases to define *motivate*: (a) you can do this, (b) that is terrible, (c) give up, or (d) you’ll never make it. The assessment evaluated students’ depth of knowledge by asking multipronged questions.

This same assessment with items in a different order was administered as a posttest at the end of the intervention as well as a delayed posttest three-weeks later. Results of the assessments were analyzed using paired t-tests.

Word Wizard Tally Chart

The word wizard tally chart served as a positive incentive aimed at encouraging students to become “word-conscious” learners. Students earned tally marks by reporting the target words they heard or saw outside of the classroom. The students were required to provide “evidence” to support their claim. The number of tally marks were analyzed at the conclusion of the intervention to
determine the frequency with which individual students noticed the use of target words outside the classroom.

Figure 1. The word wizard chart.
Student Artifacts

Student artifacts included: (a) word study charts, (b) written sentences, and (c) argumentative essays. Figure 2 shows a student’s completed word study chart from the third unit. After completing the chart, the students were asked to write two sentences that used the noun and verb forms of a word from the chart. For example, Nevaeh wrote “I think socal medea is a stuped form of communication.” This sentence appropriately uses the word *communication* as a noun. The second sentence stated, “My friend and I used to communicate all the time.” This sentence appropriately uses the word *communicate* as a verb.

![Figure 2. Nevaeh’s Word Study Chart.](image)

Students’ argumentative essays were another important data source. Students created an argumentative essay that described their perspective on the unit’s controversial topic. For example, in unit two, the students wrote an essay stating their position on whether or not the Sudanese should be integrated into the community of Mapleville.

Students’ essays were analyzed using an argumentative writing rubric that is part of the WG resources (see Table 2). The rubric evaluates four areas of the students’ writings: argumentation, evidence, organization, and language. Each category is scored on a scale of one to four (i.e., emerging, developing, proficient, and exemplary). A score of one is considered emerging and a score of four is considered exemplary. For example, in the category of *language*, if a student used the target words or related word forms incorrectly or not at all s/he would receive a score of one. By contrast, if a student correctly and consistently used the target...
Table 2
WG Argumentative Writing Rubric (SERP, 2009)

<table>
<thead>
<tr>
<th></th>
<th>Emerging (1)</th>
<th>Developing (2)</th>
<th>Proficient (3)</th>
<th>Exemplary (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argumentation</td>
<td>The writing presents only a vague or confusing claim.</td>
<td>The writing presents a clear and relatively precise claim but provides little or no evidence or reasoning to support it.</td>
<td>The writing presents a clear claim and provides evidence to support it, but perhaps no clear articulation of reasoning relating the evidence to the claim.</td>
<td>The writing presents a clear claim, provides evidence to support it, and makes clear the reasoning relating the evidence to the claim.</td>
</tr>
<tr>
<td>Evidence</td>
<td>No evidence is presented.</td>
<td>Some appropriate evidence is presented.</td>
<td>Sufficient and compelling evidence is presented.</td>
<td>Sufficient and compelling evidence is presented, and evidence that counters alternative claims is included.</td>
</tr>
<tr>
<td>Organization</td>
<td>Claim, support, conclusion, and structure are absent.</td>
<td>The evidence presented is not linked to the claim; the conclusion simply restates the claim.</td>
<td>The claim, evidence and reasoning linking them are presented in a logical order, with a conclusion reiterating the reasoning.</td>
<td>The claim, evidence, and reasoning linking them are presented in logical order, and the conclusion effectively strengthens the claim by displaying the relationship.</td>
</tr>
<tr>
<td>Language</td>
<td>Academic language forms (including focus words) are used incorrectly, or not at all.</td>
<td>Academic language forms (including focus words) are attempted, but they are sporadic and mostly not correct.</td>
<td>Academic language forms (including focus words) are used frequently and mostly correctly, but not consistently.</td>
<td>Academic language forms (including focus words) are used correctly and consistently, expect for cases where conversational language is used for specific effects.</td>
</tr>
</tbody>
</table>

words and related word forms s/he would receive a score of four. The rubric provided an objective measure for analyzing and evaluating the students’ abilities.
to effectively form arguments as well as appropriately apply target words in written contexts.

Figure 3 is an example of a student’s argumentative essay. This essay is reflective of a proficient rating due to the student’s ability to present a clear claim, which is supported by strong evidence. Additionally, the essay follows a logical order and displays correct and consistent use of the target words and related word forms within a written text.

Figure 3. A Proficient (3) Essay.

Debates

The debates center on controversial issues that align to each unit topic. Participation in the debates required a high level of structure and scaffolding. To prepare, the students completed a graphic organizer that explicitly stated their
stance, three reasons to support their stance, possible counterarguments, and closing arguments. The students were assigned to groups of three. Two groups functioned as opposing sides in the debate and the remaining group served as the debate judges.

During debates, the students were assigned to an opponent on the opposite team. I encouraged students to listen carefully to their opponent’s argument in order to formulate a counterargument. I helped both teams during the planning process to formulate three main arguments. Participation in the planning process allowed me to provide the students with insight into the opposing team’s arguments. This insight enabled the students to generate effective counterarguments prior to engaging in the debates. This step was critical to the success of the debates.

Students’ abilities to effectively plan for and engage in debates improved. Overall, the students participated in three debates. Initially, the students struggled to formulate both arguments and counterarguments. The students also neglected to incorporate target words into their arguments. Furthermore, the students lacked confidence in speaking in front of their peers. However, as they progressed, students began to incorporate target words in their speech, spoke with greater confidence, and began to spontaneously formulate counterarguments.

Findings

Pretest, Posttest, Delayed Posttest

Each assessment included 48 multiple-choice questions, 2 items for each word, and students had to get both items correct in order to get full points. Thus, the maximum score on the assessments was 24. The results of a paired *t*-test revealed that the average score on the pretest was 11 (46%) and the average score on the posttest was 19 (80%). Table 3 displays the results of the paired *t*-test. As shown in Table 3, all students demonstrated statistically significant positive differences on the pretest/posttest. There were no statistically significant differences between the posttest and delayed posttest scores indicating that students maintained their understanding of the target word meanings as indicated by their delayed posttest scores.
I further analyzed students’ assessments using a simple item analysis in order to determine which words were known by students. A word was considered “known” if students correctly answered both items related to the target word on the pretest, posttest, and delayed posttest. The analysis revealed that five of the 24 target words were known by six or more students prior to the intervention. In contrast, 23 of the 24 target words were known by six or more students after the intervention. Results of the delayed posttest revealed that 16 of the 24 target words were known by six or more students. These results revealed that the majority of the students maintained an understanding of the target words beyond the intervention.

**Word Wizard Tally Chart**

I conducted a quantitative analysis of students’ tally marks on the Word Wizard charts to determine the frequency with which they recognized target words outside of the intervention. Students contributed a total of 110 instances of target words used in out-of-classroom contexts. The most frequently cited source was “overheard comments;” that is, comments made by other teachers. Students also reported recognizing target words outside of school; for example, they cited television, radio, movies, video games, and music.

**Word Study Charts**

A review of students’ word charts across the three units revealed that all students except one correctly identified the patterns of change for the words on the charts. This is an indication that students were attentive to the class discussion about how words were changed from one form to another and were able of capturing those changes on their word study charts.

### Table 3

*Mean Performance Scores on Vocabulary Assessments*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
<th>Delayed-Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Student Sample</td>
<td>10.7(4.30) *</td>
<td>19.0(3.97) *</td>
<td>17.2(4.71)</td>
</tr>
<tr>
<td>(N = 9)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: All assessments included 24 items.
Sentences

Students were to write one sentence that used the noun form and one sentence using the verb form of a target word. I compared students’ sentences across all units. This analysis revealed that students’ abilities to correctly apply word forms in written contexts positively progressed from the beginning to the end of the intervention. For example, Tyler wrote the following sentence for seduction: “The witch seduction me to fall for her trick.” In this sentence, he used seduction as a verb instead of a noun. Tyler was able to create the following sentence in a later unit “There is a lot of pollution in the air because of car engines.” Other students demonstrated a similar trend in which they improved upon their ability to use the noun and verb forms of words correctly within written contexts. Table 4 demonstrates students’ positive sentence progression across units. It should be noted that Phillip did not write a sentence for the noun form of target words in the introduction unit. Kaitlyn wrote a sentence, but failed to incorporate any of the target words for the introduction unit. Jonathan confused the target word, integrate, for the word immigration in his sentence for unit two. By the last unit, all students correctly applied the word forms into written sentences. Examples of student sentences from unit three are listed below:

- Ashlyn wrote: “We are having a celebration for my sister’s birthday.”
- Jonathan wrote: “We need to celebrate these global events more often.”
- Paige wrote: “I got isolated from Neveah.”
- Phillip wrote: “My mom put me and my cousin in isolation.”

Table 4
Progression of Sentences across Units

<table>
<thead>
<tr>
<th>Student</th>
<th>Unit</th>
<th>Sentence</th>
<th>Unit</th>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillip</td>
<td>Introduction</td>
<td>Did not write a sentence for the noun form of target words.</td>
<td>1</td>
<td>A regulation in math class is to have your materials.</td>
</tr>
<tr>
<td>Kaitlyn</td>
<td>Introduction</td>
<td>The dog barked continuously at the wall.</td>
<td>1</td>
<td>In our local community we are scared of global pollution.</td>
</tr>
<tr>
<td>Jonathan</td>
<td>2</td>
<td>Phillip integrated or his parents integrated to the USA.</td>
<td>3</td>
<td>We need to celebrate these global events more often.</td>
</tr>
</tbody>
</table>
Argumentative Essays

The WG rubric provided an objective measure for analyzing and evaluating students’ abilities to effectively form arguments as well as apply target words in written contexts. I analyzed students’ essays from the second and third unit since the essay from unit one was highly scaffolded. I first evaluated and assigned a rating to each student’s essay using the WG rubric. The students’ essays ranged in ratings from *emerging* (1) to *proficient* (3). None of the essays were rated as *exemplary* (4).

Students who received a rating below *proficient* shared commonalities among their essays: (a) unclear arguments, (b) weak reasoning, and (c) minimal use of target words. Consider the example in Figure 4, Kaitlyn’s unit two essay, which was scored as *emerging* (1). As shown in Figure 4, Kaitlyn states a vague or confusing claim, “My position is that they should be included so they don’t feel isolated.” Readers do not understand who “they” is in this position statement or where “they” should be included. The audience does not understand that Kaitlyn is referring to the Sudanese who recently moved into a new community. Her evidence is weak and confusing without this understanding. Kaitlyn’s essay also lacks structure and organization. She states three main reasons to support her position, but does not elaborate on these reasons. Thus, her essay jumps from one reason to the next without explanation or organization, which leaves readers confused and unclear of her argument. She also neglected to include a conclusion statement. Lastly, Kaitlyn incorporated a single target word, *isolated*, in her essay. The features described above reflect a score of 1 out of 4 on the WG rubric. Thus, Kaitlyn’s essay earned an *emerging* rating.
In contrast, students who received a proficient rating shared the following commonalities: (a) clear arguments, (b) strong reasoning, and (c) moderate use of target words. Described here is Elliott’s essay. Elliott writes, “I think the Sudanese should be integrated in the community activities.” This position statement allows readers to easily understand the focus of the essay as well as Elliott’s stance. Elliott also provides sufficient evidence that is clearly linked to his position statement. For instance, each piece of evidence connects back to the idea of “community” and the need to integrate the Sudanese into these different communities. Elliott’s essay is presented in a logical order, which allows readers to make sense of his argument. He also includes a conclusion statement that reiterates his stance. Finally, Elliott

Figure 4. An Emerging (1) Essay.

Dear Mayfair Chronicle,

My position is that they should be included so they don't feel isolated. It's a good thing they are included in soccer but they should be in community activities. They should be able to spend more time in their classrooms with their classmates although they should still keep going to the class by themselves to learn English quickly. Also, they should move the English service can still have their holiday.

Sincerely,

Elliott

Emerging
correctly and consistently used multiple target words in his essay. The features described above reflect a score of 3 out of 4 on the WG rubric. Thus, Elliott’s essay earned a *proficient* rating.

Table 5 shows student ratings for essays from the second and third units. Students who improved by one rating level demonstrated a greater ability to formulate clear claims linked to evidence while also consistently and accurately incorporating target words into their writing.

**Table 5**

*Essay Ratings from Units Two and Three*

<table>
<thead>
<tr>
<th>Student</th>
<th>Unit 2 Rating (Score)</th>
<th>Unit 3 Rating (Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaitlyn</td>
<td>Emerging (1)</td>
<td>Developing (2)</td>
</tr>
<tr>
<td>Paige</td>
<td>Emerging (1)</td>
<td>Developing (2)</td>
</tr>
<tr>
<td>Phillip</td>
<td>Developing (2)</td>
<td>Proficient (3)</td>
</tr>
<tr>
<td>Tyler</td>
<td>Developing (2)</td>
<td>Proficient (3)</td>
</tr>
<tr>
<td>Jonathan</td>
<td>Developing (2)</td>
<td>Proficient (3)</td>
</tr>
<tr>
<td>Ashlyn</td>
<td>Proficient (3)</td>
<td>Developing (2)</td>
</tr>
<tr>
<td>Elliott</td>
<td>Proficient (3)</td>
<td>Proficient (3)</td>
</tr>
<tr>
<td>Norah</td>
<td>Proficient (3)</td>
<td>Proficient (3)</td>
</tr>
<tr>
<td>Nevaeh</td>
<td>Proficient (3)</td>
<td>Proficient (3)</td>
</tr>
</tbody>
</table>

For example, Tyler received a *developing* rating on his unit two essay. The essay received this rating because the writing did not clearly link evidence to the claim and included two target words. In contrast, Tyler’s unit three essay received a *proficient* rating. It received this rating because the writing presented a clear claim linked to sufficient evidence as well as included six target words. Figures 5 and 6 illustrate Tyler’s essays from each unit.
Dear Chronicle Editor,

I think the Sudanese should be integrated in the same class with others because it would help them learn English. If the Sudanese are not in class with others they won't make friends to play with or to eat lunch with. The Sudanese should be included more. It's in the town fair because we want them to feel like they are at home. I really hope you can consider moving the town fair to integrate the Sudanese into our community.

Sincerely,

Developing

3 Target Words

Figure 5. Tyler’s Unit 2 Essay
Day 10  

Writing continued

Why should I care?

Write your own letter to Representative Jones. Be sure you cover the following points in your letter:

- Who do you think is responsible for cleaning up the debris that will hit the shoreline of Oregon?
- How would you feel about paying taxes for the cleanup if your state wasn’t affected?
- Use an example from the unit or your own life to help support your argument.

Dear Representative Jones,

I think it’s our nation’s civic duty to help clean up the debris that will hit the shoreline of Oregon. I think this because our nation is dependent on salmon. The idea of having to pay taxes for the cleanup concerns me. It is unfair. I feel this way because if my state helps Oregon then it won’t affect my community. It is unfair to have to clean up the debris even if my state wasn’t affected. Because if we don’t clean up debris then the fish won’t be safe. For example, the debris can cause the fish to die. This means that our nation will have to pay more for fish.

Sincerely,

[Student's signature]

Now, check your writing. Did you...

☐ Make clear your own opinion about the issue?
☐ Give reasons to support your opinion?
☐ Include focus words to make your writing stronger?

Figure 6. Tyler’s Unit 3 Essay
The ability to state and defend a claim and to use target words was a shared theme across students’ writings. Most students demonstrated positive developments in their abilities to write effective arguments and use target words with greater frequency and accuracy in written text.

**Discussion**

The WG resources and enhancements provided a context for an enriched language experience for my students in the learning support classroom. The students no longer were engaging in a curriculum focused on the teaching and mastery of discrete skills. Instead, they were engaging in holistic literacy learning experiences that promoted their oral language and vocabulary development, comprehension, and writing. Above all, my students were motivated and highly-engaged in the WG program.

I attribute students’ motivation and engagement to the design of the WG resources. Each unit centers on a controversial topic. For example, the second unit centers on the essential question: “Should everyone be included?” This question elicited student discussion about refugees and their place in a community. Student motivation and engagement may also be attributed to a curriculum design that encourages a “noisy” classroom environment by providing multiple opportunities for peer discussion. WG lessons strategically embed “discussion questions” and “turn and talk” questions throughout the lessons. This design purposefully promotes student engagement, but also builds background knowledge, improves oral language skills, and extends students’ thinking beyond low-level comprehension questions. This was a marked shift from the prescribed curriculum. The WG lessons gave greater voice to the students and allowed them to engage in meaningful and effective discussions that simultaneously improved their broader literacy skills.

One area of marked improvement was students’ abilities to construct influential essays centered on the units’ controversial topics. The discussion component provided students’ with the appropriate oral language and background knowledge to construct influential argumentative essays. Furthermore, deep knowledge of the units’ target words enabled students to construct essays reflective of a higher academic caliber.

This study provides evidence that an enriched language development program such as WG can have a positive influence on the oral language and vocabulary development, comprehension, and writing of students in a learning support setting. This study also supports the notion that motivation and literacy
learning are strongly associated. Research suggests that motivation influences engagement and engagement influences achievement (e.g., Guthrie, 2015). Key elements of motivational instruction include: collaboration; student-choice; appropriate challenges; sustained learning; and authentic learning tasks (Parsons et al., 2015). These elements, as described above, are present within the WG curriculum. Thus, it can be argued that the WG program positively influenced students’ motivation which in turn increased their engagement and ultimately improved their overall literacy learning.

**Future Directions**

Participation in the current study has allowed me to deeply understand the purpose and role of practitioner research in education. I have come to recognize that effective classroom practices emerge when teachers “let go” and “unlearn” old practices in order to discover new or innovative approaches to learning (Menter, Elliot, Hulem, Lewin, & Lowden, 2011, p. 19). In short, the current study inspired me to abandon my previous pedagogical practices and venture into the realm of systematic inquiry.

Prior to the study, I trusted that the curriculum prescribed by the district was appropriate and effective. I relied on the curriculum to guide my instructional approaches believing that if I taught the program with fidelity students’ learning would improve. I did not question or analyze the curriculum. Instead, I was content with the status quo. My mindset changed as the students and I progressed through the intervention. I recognized that my students were flourishing and reaching higher expectations than those set forth in the prescribed curriculum. This recognition caused me to reflect on the power of action research and the mindset that accompanies it.

I came to recognize that a systematic approach to instruction aimed at answering guiding questions positively influenced my own practice as well as students’ learning. The guiding questions provided a framework from which I designed my instructional approaches. Furthermore, the guiding questions forced me to continually assess and refine my practices in order to ensure the students and I were working towards finding answers or solutions to the questions. In short, my practice evolved to reflect the cyclical nature of action research.

The evolution of my instructional approaches will continue to influence my future practice. I have shared my research results with colleagues and have discussed the Word Generation program in greater depths with the math, language arts, social studies, and science teachers on my academic teams. Following our discussion, my colleagues showed a deep interest in incorporating the WG resources into their content area classrooms. We agreed that the WG resources
provide an opportunity to engage our students in integrated learning opportunities across academic domains. Additionally, we agreed that the WG resources create a common language across academic domains that gives access to all learners; especially those who struggle with reading. It is our intention to begin implementing the WG resources within each academic domain at the start of the school year.

This year, I attended a conference centered on Word Generation. My purpose for attending was to learn how other schools were implementing WG as well as to hear the results of the implementation. The conference affirmed that the results of my research study were reflected in other classrooms. For example, the presenter, a middle school language arts teacher, discussed how students were highly motivated and engaged within the lessons. The presenter accredited students’ motivation to the fact that the units center on controversial topics that naturally elicit student participation and discussion. She also spoke about the idea that all learners, across academic domains, were part of a “common language community.” The WG resources also created a coherency across academic domains that allowed students to engage with the world and broader application of skills. Additionally, the presenter discussed the ease of implementation and the quality of the WG resources. I left the conference renewed and reaffirmed in my passion for promoting the use of WG beyond my classroom walls. Thus, the focus of this school year is to implement WG as it was designed to be implemented: across academic domains.
References


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