Adolescents' Motivation in the Context of an Academic Vocabulary Intervention in Urban Middle School Classrooms

Nonie K. Lesaux, Julie Russ Harris, & Phoebe Sloane

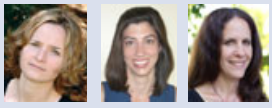
Findings from research with middle schoolers show that student motivation is fostered when instruction addresses academic *and* developmental needs; students see evidence of their growth as learners and feel successful.

It was week 10 of the academic vocabulary intervention, and small groups of students gathered around desks, intently reviewing their material from the first four units. The linguistically diverse sixth graders, many considered struggling readers, were preparing for their midpoint review, eagerly anticipating the start of a word game.

This group of students, whom their teacher described at the start of the intervention as "disengaged and lacking in confidence" when it came to language skills instruction, were fully absorbed in the day's activities. They were discussing words and the varied forms they can take and clarifying multiple meanings of several words. Some reviewed their self-generated glossaries while others reviewed the sentences and sketches they had created to provide an alternative way of defining the target words. Still others sifted through their notebooks to find ways to quiz peers in their groups.

To kick off the game, a member of the first team pulled a word out of the hat. He took a moment and then began drawing on the whiteboard while his teammates were bursting, waiting for a clue to emerge. The artist stepped back to display stick figures standing around a building—one student called out, "Community!" The opposing team watched the timer, willing it to go faster. The artist drew a Mexican flag and another student called out, "Culture!"

When the artist shook his head and continued to add more symbols above the figures, another teammate exclaimed, "No, it's the other word from that unit. You know, the one that means almost the same thing!" Another student added, "And we kept confusing them." The team sang out, almost in unison—"Ethnicity!"



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The United States' adolescent literacy levels—ones that have been stagnant for several decades—have fueled a press to better meet this population's academic needs. These reform efforts, although they may include varied approaches, are aimed at preparing learners for the increasing literacy demands of college and, ultimately, for participation in the knowledge-based global economy (Carnegie Council on Advancing Adolescent Literacy, 2010).

Despite being challenging in all settings, such improvement efforts are particularly complex in the urban school environment, which is often characterized by linguistic diversity and high numbers of students who do not read at grade level (Duncan & Murnane, 2011). In fact, statistics on academic performance in urban schools have triggered questions about tailored and appropriate instructional approaches for bolstering students' literacy skills in these settings.

Yet raising adolescents' literacy rates presents a dual challenge: to design instructional approaches that are, at once, rigorous but also engaging for students whose academic motivation can be limited. That is, research has largely indicated that students' motivation in school tends to decline during middle childhood and early adolescence (Wigfield, Eccles, & Rodriguez, 1998). At the same time, the secondary classroom is often limited in its ability to respond to adolescents' developmental needs as learners and individuals (Eccles & Roeser, 2009), posing significant challenges to maintaining and fostering students' academic motivation.

For example, as compared with the elementary setting, the secondary classroom is characterized by greater emphasis on teacher control and discipline, an increase in whole-class task organization, fewer opportunities for student decision making and choice, and classroom work that requires lower-level cognitive skills (Eccles & Roeser, 2009). Moreover, in the urban school characterized by significant linguistic diversity, there are particular concerns about the population's compromised educational opportunities and academic outcomes (Gándara & Rumberger, 2009).

An approach for raising literacy rates that is beginning to gain traction may, in fact, address the dual challenge of implementing rigorous and engaging instruction for this population. That is, given that research indicates many students in these underperforming settings require significantly more support in the domains of academic language and vocabulary development, intervention efforts have begun to target these specific skills (for a review, see Nagy & Townsend, 2012).

Although this approach is designed primarily to support language and reading comprehension, we also have reason to believe that it may simultaneously address the need to create a more developmentally responsive learning environment in the secondary classroom. Indeed, high-quality academic language and vocabulary instruction, by its very nature, lends itself to increased student collaboration, autonomy as learners, and opportunities to respond to and engage with material that promotes critical thinking (Kame'enui & Baumann, 2012). As a result, there is reason to study the relationship between students' participation in such instruction and their academic motivation.

In this article, we focus on sixth graders from linguistically diverse backgrounds, many with underdeveloped language and reading skills, who participated in an academic vocabulary intervention designed for the urban English language arts (ELA) classroom. Described in more detail in the following section, on average the intervention boosted participants' language and reading comprehension skills (Lesaux, Kieffer, Faller, & Kelley, 2010; Lesaux, Kieffer, Kelley, & Harris, 2012). Of course, students' active participation underlies the overall results of this and other interventions, but, as a field, we rarely ask them about such experiences, particularly with respect to the ways in which their efforts toward academic success were encouraged or discouraged (Brozo, 2006).

We designed this study to do just that. At the end of each of two intervention cycles (in two consecutive academic years), we not only studied the intervention's effects on language and literacy skills, but we also explored the ways in which middle schoolers discuss their academic motivation, particularly as it relates to the instructional content and strategies.

To do so, we conducted 20 focus groups with a subsample of participating students. Our purpose was to foreground student voices and draw on their perspectives to shed light on which instructional approaches piqued their academic motivation, in the context of the challenging grade-level literacy intervention implemented in their ELA classrooms.

Literacy Instruction and Academic Motivation in Urban Middle Schools

Even though low student motivation may be developmental during middle childhood and early adolescence (Meece, Anderman, & Anderman, 2006; Wigfield et al., 1998), it is also important to acknowledge that motivation is largely context-specific (Anderman, Andrzejewski, & Allen, 2011; Moje, Dillon, & O'Brien, 2000). By *academic motivation*, we mean the desire to learn academic content, a desire characterized by initiative, perseverance, attention to quality, and aspiration (Meece et al., 2006; Wigfield et al., 1998). It is neither an all-or-none construct nor a fixed one. Instead, it varies in degrees and is dynamic.

In the context of intervention design, research confirms the need to view academic content, instructional practices, and academic motivation as highly interrelated (Meece et al., 2006). In the domain of academic motivation as it relates to literacy, research tells us that variation is largely a function of the text and activity at hand, as well as the social, cultural, and disciplinary context (Moje et al., 2000).

Research on academic motivation presents a complex story for adolescent literacy reform. On the surface, the findings conform to common ideas about adolescents' desire for choice and independence but also remind us that teens likewise crave opportunities to feel successful and competent. The findings from interviews conducted with middle school and high school students from diverse backgrounds across two studies highlight this complexity (Ivey & Broaddus, 2001; Smith & Wilhelm, 2004).

Specifically, Ivey and Broaddus (2001) found that many of their sixth-grade participants felt that assigned reading was unappealing, but not necessarily because it was *assigned*; instead, many students described assigned texts as difficult to comprehend. Further, Smith and Wilhelm (2004) documented that their participants initially appeared to lack academic motivation, but in fact the feelings they described were better characterized by a lack of academic confidence. Many of these students explained that if they felt supported to improve their academic abilities (in this case, reading abilities) and witnessed their own growth, they would be more motivated to continue to develop those skills.

So, for struggling adolescent readers in the urban middle school, what would constitute a rigorous yet supportive approach to literacy instruction? This question presents a design challenge: Though we would be remiss to lower our expectations, rigorous academic content at grade level could potentially be discouraging. Indeed, implementing academically rigorous and challenging instruction means an approach that necessarily is highly developmentally responsive and supportive. With this research in mind, we designed an intervention with the intent of raising literacy rates while also paying close attention to how the approach could promote students' efforts toward academic success.

In response to the findings of previous research, the intervention under study focused on the target population's weaknesses in language and vocabulary (Lesaux & Kieffer, 2010; Snow, Lawrence, & White, 2009), especially the specialized academic vocabulary of text (Coxhead, 2000).

When designing the intervention, we operationalized four key principles of effective vocabulary instruction: (1) it is text-based, so that academic words are studied in the authentic contexts in which they are used (e.g., Beck, McKeown, & Kucan, 2002); (2) it emphasizes increasing students' depth of word knowledge (e.g., Stahl & Nagy, 2006); (3) it develops students' word-learning abilities, particularly through morphology instruction (e.g., Baumann et al., 2002); and (4) it culminates in the opportunity to use the target words in an extended language production activity (e.g., Graves & Watts-Taffe, 2002; see Table for a detailed description).

Having identified these guiding principles, we then attended to the nature of the instruction. We focused on designing learning opportunities that addressed what we know about language development while taking into account sixth-grade students' developmental stage. Ultimately, three instructional elements were central to meeting these dual challenges.

First, the intervention incorporated collaborative learning activities, providing students with regular opportunities to engage with one another in structured interactions (including role-play and word play) and discussions. This element of the intervention design was intended to increase classroom talk through positive social interactions, at once boosting language development (Stahl & Nagy, 2006) and addressing the social aspects of academic motivation, particularly in a language-learning context (Wigfield et al., 1998).

Teens…crave opportunities to feel successful and competent.

TABLE Intervention Summary

Instructional component	Example
Anchors word learning in engaging, rich text(s) that features academic vocabulary and focuses on complex topics and/or questions without easy answers	Text topic: Features a soccer league in one of Africa's poorest slums Target academic words: affect, area, community, contribute, culture, establish, ethnic, resident, welfare Concepts: community service, tolerance Big question: How do you build community?
Provides multiple, meaningful opportunities for building deep word knowledge (i.e., structured and collaborative activities in which students contemplate, talk, and play)	In pairs, students engage in a mock interview. One student pretends to be someone (famous or familiar) who helps a community. The other student responds to questions containing the target words. Partners switch roles.
Develops word-learning skills through explicit instruction in analysis of meaningful word parts (i.e., morphology)	After studying the word part *-tion*, students revise sentences from the text to include a different form of the base word. For example, students rewrite *The young people learned that they can contribute to their community* to retain its meaning but use *contribution* instead.
Reinforces language development and critical thinking with language production activities (e.g., writing, debate)	Students respond to the writing prompt: *If you could establish a program to improve the lives of children in your school or community, what would it be? Explain how it would affect their lives. Give at least three examples of ways it would improve their lives.* Written pieces include relevant target words.

Second, because every unit revolved around a short piece of informational text, we gave considerable attention to text selection. We selected texts that lent themselves to teaching academic vocabulary (i.e., from each, we chose eight or nine high-utility academic words for study) as well as those with significant potential for student engagement based on topic. Several of the texts featured topics salient to adolescent youth culture, whereas others addressed current social or scientific issues.

Because quality comprehension instruction necessarily links to the text's content and moves beyond it, all articles were explicitly linked to larger questions without easy answers, and instruction began with connections to students' background knowledge and daily lives. These text-based learning opportunities were aligned not only with current principles of reading instruction (Gambrell, Malloy, & Mazzoni, 2011) but also with research that suggests educators may increase their students' academic motivation by incorporating students' home and community values and identities into the curriculum (e.g., Au & Raphael, 2000; Kirkland, 2011).

Third, all instruction was embedded in an instructional cycle that followed a developmental sequence of specific activities for building word knowledge incrementally. To move through this cycle, students had to take increasing responsibility for their learning, often choosing between activities to complete and deciding which questions to discuss and/or contemplate. This element of the intervention's design aligns with research on adolescent motivation. Specifically, the design adheres to the knowledge base that suggests student autonomy is a potential mechanism for increasing motivation (Eccles & Roeser, 2009; Meece et al., 2006).

Taken together, this approach is intended primarily to boost adolescents' literacy skills, but it also may be more aligned with a developmentally responsive learning environment than is standard.

Study Context

The intervention, which we refer to as Academic Language Instruction for All Students (ALIAS), features nine 2-week units, each consisting of nine 45-minute lessons, and two 1-week review units. (In year one, ALIAS was 18 weeks, featuring eight 8-day units and two 1-week review units. In year two, an "introductory" unit was added, and each unit lasted 9 days.)

ALIAS was implemented and investigated for two consecutive years in a large, urban school district in the southwestern United States. During the first year of implementation (2007–2008), the study was conducted in seven middle schools, and its design was quasiexperimental (Lesaux et al., 2010). In the second year of the project (2008–2009), we implemented a large-scale, randomized field trial in 14 middle schools (Lesaux et al., 2012). In both years, approximately 56% of participants could be

considered struggling readers, and approximately three quarters of the participating students were from homes where English was not the primary language. At the average participating school, 58% of students qualified for free or reduced-price lunch.

In both years of the investigation, treatment effects were observed on researcher-developed measures of academic vocabulary knowledge, morphological skills, and reading comprehension of expository texts, including academic words. In year one, treatment effects were also observed on a standardized global measure of reading comprehension. In year two, we investigated the ways in which students' vocabulary knowledge at the intervention's outset influenced its effect.

We found that the intervention's impact on measures of vocabulary knowledge and writing were generally larger for students with the lowest vocabulary levels. However, the intervention's impact on measures of text comprehension (i.e., a researcher-developed measure of expository text comprehension and the ELA section of the California Standards Test) were largest and significant for students who began the intervention with slightly below average and average vocabulary levels.

Focus Groups and Data Analysis

Here, we concentrate on data from 20 focus groups (12 in year one, 8 in year two), each composed of a subsample of participants from the two studies described. In year one, the participants were drawn from six participating classrooms, and in year two they were drawn from eight classrooms. The classrooms were deliberately chosen to capture varying levels of student achievement and program implementation.

Teachers selected 6–8 participants for the focus groups, representing a cross-section of their student population (i.e., gender and achievement level). Two members of the research team conducted the focus groups (one was also a program specialist who supported teachers' implementation and was somewhat familiar to students).

The focus-group facilitator led each discussion using a semistructured interview protocol designed to gauge students' interest level in the overall intervention and their opinions about instructional activities (e.g., What's something that you thought, "I (don't) really look forward to that part of the unit"?) and topics (e.g., What kind of articles did you like the most?), the degree of difficulty of the assignments (e.g., What made writing personal definitions difficult/easy?), and their perceptions of what they learned from different elements of the intervention (e.g., When you wrote at the end of each unit, what did you learn?).

We took a grounded theory approach to data analysis (see Auerbach & Silverstein, 2003), analyzing the interview transcripts to identify meaningful patterns across participants' responses. We then used these patterns to develop data-based hypotheses. As such, the themes presented in the following section were not decided on a priori but rather became apparent through our analytic procedure.

Phoebe (third author) analyzed the interview transcripts, engaging in an iterative process, reading the texts and coding them for *repeating ideas* (i.e., patterns within and between transcripts). These codes were then categorized by theme. Our unit of analysis was the conversational turn (Smith & Wilhelm, 2004). After this in-depth, initial coding process, a second rater (Julie, second author) read the transcripts to check the initial codes for accuracy and then to discuss these codes. After the two raters discussed the identified themes and the interview content supporting those themes, minor discrepancies were resolved via discussion, and the thematic categories were finalized.

Our Findings

Through our analysis, we identified three key themes, which shed light on students' experiences during the intervention and expose their thoughts about the ways in which it influenced their efforts toward academic success. It would be an oversimplification to say that all students' experiences fit neatly into these themes. The students provided a range of responses—sometimes contradictory—as they shared their viewpoints. However, taken together, the patterns presented here reflect the prototypical participating student's insights and provide information for further research on adolescent literacy reform.

The Reinforcing Nature of Vocabulary Development

Many participating students reported increased enjoyment during literacy activities that provided opportunities for them to witness their growing vocabulary knowledge, particularly capstone activities. As one student put it, "I know that now I'm kind of using, like, more interesting words."

For instance, when describing her favorite part of the intervention, one student said, "What I liked the most was the writing at the end, just because it shows you how much you know of the words and how much you can put all those words in a sentence and make it...right." For her, generating an extended written text provided a rewarding and favorable opportunity to demonstrate ownership of the studied words.

For other students, their perceived increased word knowledge appeared to be related to reports of increased academic confidence. One student explained, "The words, they're becoming more natural to us, and you learn how to put them in sentences more. So you feel smart and stuff, but, like, you know a lot of stuff." Notably, students reported experiencing these increased feelings of confidence outside the ELA classroom as well. For example, one student commented, "I kept on hearing [academic words] more often on the news. And before, I didn't know what they meant." During another focus group, a student noted that "you can see these words, like, all around, so it's really actually helping you."

These responses suggest that program participants linked their word learning to motivating feelings of academic enjoyment and confidence. For us, this sense of success begged the inevitable question, What was it about this intervention that helped students to be, and feel, academically successful? Thus, the second and third themes focus on particular intervention features that provided academic support and academic rigor.

The Importance of a Scaffolded Learning Environment

When it came to increasing participants' sense of academic success, two program features were discussed repeatedly: (1) the instructional cycle and (2) the opportunities to study content deeply.

Instructional Cycle. According to many students, engaging in consistent day-to-day and unit-to-unit lesson structures was helpful. "Once we started doing [ALIAS], it was kind of like a routine," explained one student. "Every day, we would get our AVNs [Academic Vocabulary Notebooks, in which the day's activities were located] out and start working on it, so, like, we got used to it, and it just helped."

Participants linked their word learning to motivating feelings of academic enjoyment and confidence.

As one would expect, the students' contradictory opinions about the relative difficulty of the program's activities surfaced. Interestingly, however, what came up in these discussions was that many students' perceptions changed over the course of the intervention. At first, the program presented novel and challenging approaches to language, reading, and writing development, and students felt bogged down trying to understand the instruction and expectations.

When these same learning activities reappeared in subsequent units, however, students explained that they could move through tasks with ease and focus on their developing literacy skills. This conversation is an illustration:

> *Student 1:* [An ALIAS activity] was kinda hard. [conversation momentarily veers off-topic]
>
> *Student 2:* But then you started getting the hang of it.
>
> *Interviewer:* So, the first time you did it, it was probably harder than the second time.
>
> *Student 3:* Yeah, and then when we got into it, and we started having more of those, we started doing better at it.

Opportunities to Study Content Deeply. Students identified the focus on depth of study over breadth of material covered as the other program feature that supported learning and fueled their motivation. Indeed, the target words—and the concepts they represent—were studied from several angles, using multiple methods, over an extended period.

Students appeared to have grasped that the learning objective was to gain a deep conceptual understanding of a select group of academic words. One participating student said, "I think it's because [referring to why the intervention was beneficial], like, all the different ways of learning [the vocabulary words]. You can, like, learn how to do it in one way, and then you can express it a different way, and then you get it better."

In discussing a word-learning approach that required students to sketch a definition of the word and write a sentence to accompany the sketch, students described how this task encouraged them to consider the kinds of situations that you could "say

[the vocabulary word] in" and how it pushed them to "think about [the word] different[ly]."

Interestingly, most students commented that the approach was unique compared to prior word work. One student explained, "Usually, they just give us the word, and we have to write the definition." Another student reiterated this sentiment, "We would say the word, and then we would say the definitions over and over until we get it right."

The Importance of a Sufficiently Challenging Learning Environment

As discussed, designing grade-level instruction for students with underdeveloped reading skills is a challenge. In this case, focusing on the nuanced and abstract academic language of text could potentially present frustrating or discouraging experiences. However, for many participating students, likely in the context of the supportive intervention features described previously, the opportunity to study rigorous content was, in and of itself, a motivational aspect of the intervention.

Many students talked about rigor with respect to the words and the texts. As one student explained, "I liked when we learned new words that were hard.... And I thought I was never gonna learn those [academic words] if we never had this program." Another explained, "I found interesting…the new words that we found out. It's a way to encourage us how to use them and how to find definitions. Now we have ways to use them in sentences, so we always learn new words."

Notably, students' responses suggested that interest in a text was not necessarily determined by preexisting preferences but instead by the way in which the text gave them new things to think about. For example, one student explained why a text topic about children in Kibera was of interest: "I like the part where we were learning about different countries."

Along the same lines, another student explained why she liked an article about disappearing bees: "Because how people just—they think bees are, like, ugly creatures and stuff, but, like, when you get to know them, when you get to read about them, they [are] actually interesting."

Finally, when it came to understanding students' preferences for a sufficiently challenging learning environment, the voices of those with alternative perspectives also provided particularly compelling insights. Indeed, students' conversations touched on an issue that those engaged in teaching and curricular design confront daily: finding and working in students' zone of proximal development—pulling them along while providing them with opportunities to practice learned skills.

Students reported boredom when activities did not allow them to put their new knowledge to the test, but they were also frustrated by tasks that made it impossible to do so. For example, one review activity was an adapted game of a popular TV quiz show. The game involved multiple-choice rather than open-ended questions, which one group of students felt to be unnecessary scaffolding. One student asked, "Why was the game so easy?" Another classmate clarified, "Why did you put the answers at the bottom, like two choices?" The discussion continued, "I think you should take [the answer choices] away. It would be more challenging and more fun."

In contrast, students articulated their frustration and lack of interest with tasks that felt like impossible challenges. In one example, a teacher had increased the number of vocabulary words to be used in the writing assignment by 30%: "Our teacher made us do instead of, like, five [target words in our writing], she made us do eight, and that's hard." Unlike those who expressed increased enjoyment and confidence when writing, these students found the more arduous writing activity discouraging.

Implications for Teaching

Improving adolescents' literacy outcomes presents a dual challenge. We must provide learning opportunities that are rigorous enough to prepare them for the literacy demands of college and the workplace while fostering their academic motivation, which is often waning at this developmental stage (Meece et al., 2006; Wigfield et al., 1998).

Here, we analyzed data from 20 student focus groups conducted with sixth-grade ELA students who participated in an academic vocabulary intervention to boost their vocabulary and reading comprehension skills. Although this study was designed to uncover student perceptions of a particular instructional reform within a particular context, certain themes were so salient across focus groups that we share their implications for educators.

The insights gained from the middle schoolers in this study suggest that high-quality academic vocabulary and language instruction can facilitate students' academic motivation. Further, the insights shed light on a few key implications for ELA

Take Action

STEPS FOR IMMEDIATE IMPLEMENTATION

TAKE THESE STEPS TO ADDRESS THE GOALS OF BUILDING STUDENTS' ACADEMIC VOCABULARY KNOWLEDGE AND INCREASING THEIR ACADEMIC MOTIVATION:

1. Implement a routine instructional cycle that supports middle schoolers' learning.
   - ✓ Provide opportunities to study academic words and concepts from several angles, using multiple methods, over an extended period
   - ✓ Allow students to take increasing responsibility for their learning
   - ✓ Use a combination of whole-group and small-group learning formats
   - ✓ Incorporate reading, writing, listening, and speaking activities
2. Provide students with access to rigorous content for an appropriate challenge.
   - ✓ Select high-utility academic vocabulary words and the complex concepts they represent
   - ✓ Begin with social issues and scientific topics that can readily be linked to students' lives and that give them something new to think about

TO SEE EVIDENCE OF YOUR OWN PROFESSIONAL GROWTH AS YOU IMPLEMENT THIS INSTRUCTION:

1. Take your time at first, allowing students to learn the expectations and process.
2. Stick with the instructional cycle—a quality routine isn't boring, it's supportive!
3. Reflect on your approach. Ask yourself:
   - ✓ Is my instruction focused on rigorous, grade-level content?
   - ✓ Am I providing the supports my students need to make progress?
   - ✓ Do I have structures in place for students at different levels to see their own progress?

teachers targeting their students' academic language development and working with linguistically diverse students, struggling readers, or both.

To start, students reminded us how motivating it is to experience their own progress. They described how much they wanted to "feel smart" and how feeling smarter is a lever for increasing motivation in the academic context. The implication from this finding, then, is that teachers should provide opportunities for students to perceive their growing vocabulary knowledge.

According to our participants, one element of this particular instructional approach that provided students with the chance to witness their own progress was each unit's final writing activity. Teachers might conclude their vocabulary units with capstone activities that involve the generation of academic language through writing, for example, or through student debates or class presentations. Sixth graders in this study also explained that they perceived their growing vocabulary knowledge when listening to and comprehending academic language beyond the school day. Teachers' might encourage students to listen for and use the unit's vocabulary terms outside the classroom and then report back about these academic language encounters.

Students also explained that a challenging yet supportive learning environment helps them to be, and to feel, academically successful. This key learning sheds light on two other implications for teachers: challenge students and support them as they work through these challenges. By *challenge students* we mean persist with rigorous expectations.

Teachers who are focused on increasing their students' motivation and raising literacy rates should target academically rigorous and challenging instructional goals, providing students with increased opportunities to feel competent at grade level. When working with populations of students similar to our participants (i.e., students who need significantly more support to develop academic English), ELA teachers should have students study complex academic vocabulary, read and write about multifaceted social and scientific issues, and discuss questions without easy answers.

As mentioned, challenging students has a complementary implication: supporting them as they work through these challenges. By *supporting students* we mean providing them with the structure and multiple learning opportunities they need to achieve success. Students made clear that instructional scaffolds were instrumental in making rigorous content engaging rather than discouraging. Students in this study felt supported by a consistent instructional routine that offered enough repetition and coherence to make positive outcomes attainable.

ELA teachers working in comparable settings might foster a supportive learning environment by embedding rigorous coursework in a recurring

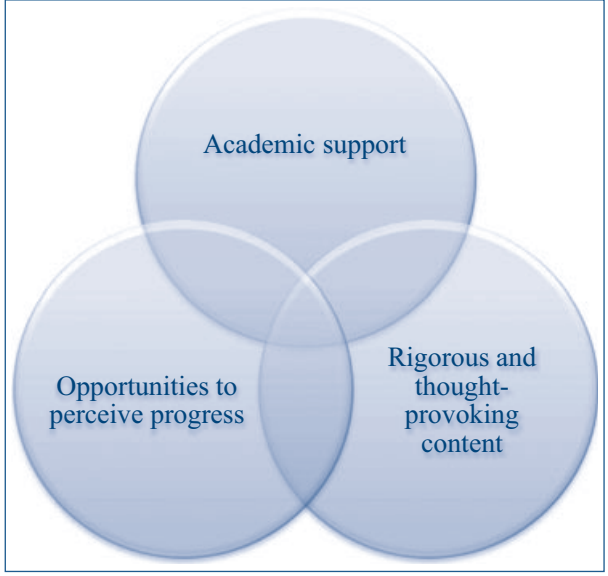
instructional cycle. This cycle should enable students to gain familiarity and ease with the expectations and processes associated with those activities that repeat from unit to unit.

Core activities should recur across instructional cycles, but, within each unit, activities chosen should approach learning goals in diverse ways, supporting students as they build depth of knowledge but engaging them with variety, too. This means some activities will focus on language comprehension through reading or listening, and others will focus on language production, such as role-play, writing, structured word games, or discussions.

Notably, when considering these qualitative themes in tandem with the quantitative findings from the larger intervention study, we are reminded that the ways in which teachers enact the implications outlined here might resonate differently with learners. That is, we know from the results of the randomized controlled trial that students' vocabulary knowledge at the program's outset influenced their gains.

In this study, we looked for patterns across students and found a common theme regarding the motivating nature of academic progress. Yet, it stands to reason that this motivating sense of success was associated with different aspects of the program for different students, perhaps depending on their particular strengths and struggles as readers and writers. Keeping in mind students' diversity as learners, we highlight once more the need for teachers to provide varied learning opportunities, all within an instructional routine that provides the time and space for demonstrating and celebrating the many aspects of literacy development.

FIGURE Hypothesized Key Ingredients for a Motivating Learning Environment



Taken together, as illustrated in the diagram in the Figure, responses from our participating students continually brought us back to an age-old premise: When instruction is designed to provide adolescents with learning opportunities that aim to address their academic *and* developmental needs, there is an opportunity to influence academic motivation. Indeed, a motivating learning environment is likely one in which students not only receive age-appropriate supports to access rigorous, thought-provoking content but also see evidence of their own progress.

Notes

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References

Anderman, L., Andrzejewski, C., Allen, J. (2011). How do teachers support students' motivation and learning in their classrooms? *Teachers College Record*, *113*(5), 969–1003.

Au, K.H., & Raphael, T.E. (2000). Equity and literacy in the next millennium. *Reading Research Quarterly*, 35(1), 170–188. doi:10.1598/RRQ.35.1.12

Auerbach, C.F., & Silverstein, L.B. (2003). *Qualitative data: An introduction to coding and analysis*. New York: New York University Press.

Baumann, J.F., Edwards, E.C., Font, G., Tereshinski, C.A., Kame'enui, E.J., & Olejnik, S. (2002). Teaching morphemic and contextual analysis to fifth-grade students. *Reading Research Quarterly*, 37(2), 150–176. doi:10.1598/RRQ.37.2.3

Beck, I.L., McKeown, M.G., & Kucan, L. (2002). *Bringing words to life*. New York: Guilford.

Brozo, W. (2006). Tales out of school: Accounting for adolescents in a literacy reform community. *Journal of Adolescent & Adult Literacy*, *49*(5), 410–418. doi:10.1598/JAAL.49.5.5

Carnegie Council on Advancing Adolescent Literacy. (2010). *Time to act: An agenda for advancing adolescent literacy for college and career success*. New York: Carnegie Corporation of New York.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, *34*(2), 213–238. doi:10.2307/3587951

Duncan, G.J., & Murnane, R. (Eds.). (2011). *Whither opportunity: Rising inequality and the uncertain life chances of low-income children*. New York: Russell Sage Foundation.

Eccles, J.S., & Roeser, R.W. (2009). Schools, academic motivation, and stage-environment fit. In R.M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 404–434). Hoboken, NJ: Wiley. doi:10.1002/9780470479193.adlpsy001013

Gambrell, L.B., Malloy, J.A., & Mazzoni, S.A. (2011). Evidence-based best practices in comprehensive literacy instruction. In L.M. Morrow & L.B. Gambrell (Eds.), *Best practices in literacy instruction* (4th ed., pp. 11–36). New York: Guilford.

Gándara, P., & Rumberger, R.W. (2009). Immigration, language, and education: How does language policy structure opportunity? *Teachers College Record, 111*(3), 750–782.

Graves, M.F., & Watts-Taffe, S.M. (2002). The place of word consciousness in a research-based vocabulary program. In A.E. Farstrup & S.J. Samuels (Eds.), *What research has to say about reading instruction* (pp. 140–165). Newark, DE: International Reading Association. doi:10.1598/0872071774.7

Ivey, G., & Broaddus, K. (2001). "Just plain reading": A survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, 36(4), 350–377. doi:10.1598/RRQ.36.4.2

Kame'enui, E.J., & Baumann, J.F. (Eds.). (2012). *Vocabulary instruction: Research to practice* (2nd ed.). New York: Guilford.

Kirkland, D.E. (2011). Books like clothes: Engaging young black men with reading. *Journal of Adolescent & Adult Literacy, 55*(3), 199–208. doi:10.1002/JAAL.00025

Lesaux, N.K., & Kieffer, M.J. (2010). Exploring sources of reading comprehension difficulties among language minority learners and their classmates in early adolescence. *American Educational Research Journal, 47*(3), 596–632. doi:10.3102/0002831209355469

Lesaux, N.K., Kieffer, M.J., Faller, S.E., & Kelley, J.G. (2010). The effectiveness and ease of implementation of an academic vocabulary intervention for sixth graders in urban middle schools. *Reading Research Quarterly, 45*(2), 196–228. doi:10.1598/RRQ.45.2.3

Lesaux, N.K., Kieffer, M.J., Kelley, J.G., & Harris, J.R. (2012). *Effects of academic vocabulary instruction for linguistically diverse adolescents*. Manuscript submitted for publication.

Meece, J.L., Anderman, E.M., & Anderman, L.H. (2006). Classroom goal structure, student motivation, and academic achievement. *Annual Review of Psychology, 57*, 487–503. doi:10.1146/annurev.psych.56.091103.070258

Moje, E.B., Dillon, D.R., & O'Brien, D. (2000). Reexamining roles of learner, text, and context in secondary literacy. *The Journal of Educational Research*, 93(3), 165–180. doi:10.1080/00220670009598705

Nagy, W., & Townsend, D. (2012). Words as tools: Learning academic vocabulary as language acquisition. *Reading Research Quarterly, 47*(1), 91–108. doi:10.1002/RRQ.011

Smith, M., & Wilhelm, J.D. (2004). "I just like being good at it": The importance of competence in the literate lives of young men. *Journal of Adolescent & Adult Literacy, 47*(6), 454–461.

Snow, C.E., Lawrence, J.F., & White, C. (2009). Generating knowledge of academic language among urban middle school students. *Journal of Research on Educational Effectiveness, 2*(4), 325–344. doi:10.1080/19345740903167042

Stahl, S.A., & Nagy, W.E. (2006). *Teaching word meanings*. Mahwah, NJ: Erlbaum.

Wigfield, A., Eccles, J.S., & Rodriguez, D. (1998). The development of children's motivation in school contexts. *Review of Research in Education*, 23(1), 73–188.

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