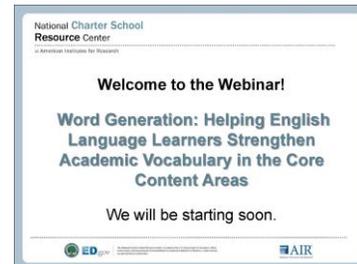


Word Generation: Helping English Language Learners Strengthen Academic Vocabulary in the Core Content Areas

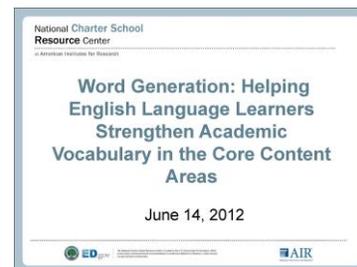
Part 1



Slide 1

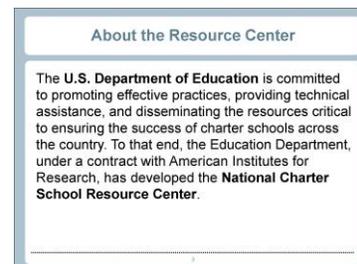
PEGGIE:

Welcome, everyone. This is Peggie Garcia from the National Charter School Resource Center. Welcome to the webinar: Word Generation: Helping English Language Learners Strengthen Academic Vocabulary in the Core Content Areas.



Slide 2

We are funded by the U.S. Department of Education. We are conducting a webinar series related to ELLs [English language learners]. This is our 12th and final webinar in our ELL series. You can check out our website at www.charterschoolcenter.org to see archives of all of the other webinars in this series.



Slide 3

Before I introduce our distinguished presenter, Dr. Claire White, I'm going to give you a quick overview of the webinar platform.

On the left-hand side, we have a chat window. You can enter any questions you have in the chat, and then we'll cue them up for the Q and A. We will start the Q and A with about 15 or 20 minutes to go during the webinar.

You can listen to the audio portion either through your computer or over the phone. If you join by phone, please mute your computer speakers to prevent an

echo effect. If you have any problems with the audio during the webinar (if you are listening over your computer), you're welcome to switch back to the phone. The phone number and participant code that you need are in the chat box.

Finally, this webinar is about Word Generation. I strongly encourage you to visit that website [<http://wg.serpmedia.org/>] and download their really high-quality and free materials after the webinar. The website to do that is in the chat box as well.

On the left-hand side of the platform below the chat box, we have a file share window. So I put a PDF copy of the slides in that file share window. I sent a reminder this morning. But if you did not receive that reminder, all you have to do is just click on the file and then Save to My Computer at the bottom of the file share box. You can download the file and print the slides out if you'd like to take notes directly on the slides. Below the PowerPoint slides, there are some participant notes you can refer to during the webinar.

Again, just a reminder, to ask a question, you can enter a question in the chat box to the left at any point during the webinar. You may use the full screen option on the top right of the slide, or the file can be downloaded from the file share window—if you're having trouble seeing the slide and you want it to be a little bit bigger.

If you listen over your computer, please note that your bandwidth will affect the quality of the audio. To hear the highest quality audio possible, you should use a wired connection for your computer, close all applications other than Adobe that are running on your computer, and clear your browser's cookies.

This webinar is being recorded, and an archive will be available after the webinar at www.charterschoolcenter.org/webinars.

So we are really pleased to welcome Dr. Claire White to the webinar today. She is the director of the Word Generation program, which is housed at the Strategic Education Research Partnership, or SERP. They began developing this program in collaboration with the Boston Public Schools, but she now works with a number of other field sites throughout the country.



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Before joining SERP, Dr. White worked as an education specialist at the Massachusetts Department of Education in the Office of Language Acquisition and Academic Achievement, providing training in ELL literacy issues to teachers, administrators, and state education leaders. Dr. White received her doctorate from the Harvard Graduate School of Education.

Welcome, Dr. White. I'm going to go ahead and turn it over to you. Thank you for joining us today.

DR. WHITE:

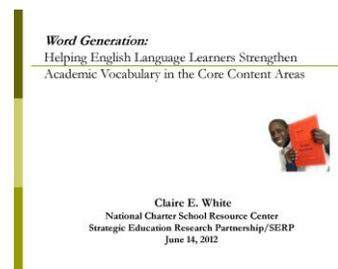
Thank you very much, Peggie. It's great to be with everyone. How is the sound? Is the sound good for everybody?

PEGGIE:

Sounds good to me. If anyone is having a problem, please enter a question in the chat, and we can try and adjust.

DR. WHITE:

All right. Well, thank you very much for that kind introduction. Let me figure out how to do this. I'm going to go straight to the first page—the first slide. I don't know why there is no...



Slide 5

PEGGIE:

Click on the arrows [for the] animation.

DR. WHITE:

I'm sorry. I'm a bit of a Luddite, everyone, so bear with me.

I work at the Strategic Education Research Partnership. We're housed here at Harvard [University], at the Graduate School of Education. Catherine Snow is the research director for SERP here at Harvard, and we do the research and development here. SERP's main office is located in Washington, D.C.

The SERP organization brings together researchers and practitioners to solve problems together in real time, which, we know, is unusual. We work regularly with district leaders, with superintendents, administrators, but, most importantly, we work with practitioners who contribute to the development of tools, resources, and materials that are field tested in the school sites. One of these resources and tools that was codeveloped with teachers is Word Generation.

The purpose of this presentation is to tell you much about what you already know about gaps in vocabulary and academic language in middle school students—with a focus on English language learners and low-income students—and how these gaps interfere with comprehension of content area text. [We] also [want] to introduce to you the Word Generation curriculum, which is a discussion-based program designed to teach academic vocabulary in language across the core content areas.

The agenda is we're just going to do a quick review, reminding ourselves [of the following:]

- What struggling readers and English language learners and low-income children have in common
- The particular challenges of reading comprehension, especially in the content areas

The Strategic Education Research Partnership (SERP)

- Organization that brings together researchers and practitioners to solve problems together in real time
- Work regularly with superintendents, academic superintendents, directors of literacy, administrators, etc.
- Most importantly, we work with *practitioners* who contribute to the development of tools, resources and materials that are field tested in the schools

Slide 6

Purpose of this presentation

- To discuss how gaps in vocabulary in middle school students, particularly English language learners and low-income students, interfere with comprehension of content area texts
- To introduce the *Word Generation* curriculum – a program designed to teach academic vocabulary across the core content areas

Slide 7

Agenda

- The nature of the problem: Reminding ourselves about struggling readers with a focus on English language learners and low-income children
- The particular challenges of reading comprehension, particularly in content areas
- The crucial role of discussion in promoting academic language
- One approach to building vocabulary and academic language through discussion: *Word Generation*
- Results: target word gains and writing outcomes
- Conclusion

Slide 8

- The crucial role that discussion plays in promoting academic language, especially for ELLs
- One approach to improving these outcomes through discussion...we'll be discussing Word Generation
- A very quick review of results
- Your questions to me

You're all very familiar with somewhat grim statistics on adolescent literacy as well as English language learners. We know that very few of our secondary students read proficiently and that Hispanic and African-American middle and high school students are overrepresented: Almost 90 percent of them are reading below grade level.

Adolescent literacy and English language learners

- Only 30% of secondary students read proficiently (nationally)
- 89% of Hispanic and 86% of African American middle and high school students read below grade level (NCES, 2007)
- 57% of adolescent ELLs were born in the US (Batalova, Fix, & Murray, 2005)
 - This suggests many English language learners are not learning the core content in English despite many years in US schools (August, 2006)
- The achievement gap between ELLs and non-ELLs is most striking at the middle and high school level (Education Week, 2009)
- Massachusetts: Since TBE was voted out, the high school dropout rate nearly doubled for students still learning to speak and write in English (Gaston Institute, UMASS, 2009)

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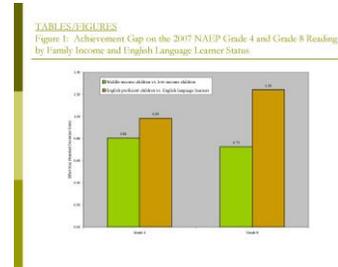
A very striking statistic is that 57 percent of adolescent ELLs were actually born in the United States, which means that they had been receiving services. They're probably now 13 and 14, but they're products of U.S. public schools, and still they don't have the kind of language necessary to get them off the label of ELL and certainly not being able to do regular mainstream academic work.

It's clear that English language learners are not learning the core content, and we believe it's because they don't have the kind of oral language skills—academic language—necessary for academic achievement.

A recent *EdWeek* article shows that the achievement gap between ELLs and non-ELLs is most striking at the middle and high school level. In our own state here in Massachusetts, we voted out transitional bilingual education. I didn't, but the voters voted in a referendum to do away with bilingual education. Since 2005, the high school dropout rate has nearly doubled for students who are learning to read and write in English.

This suggests to me that they are not getting the kind of academic language in English necessary to do well in school.

A very quick review of this chart, this NAEP [\[National Assessment of Educational Progress\]](#) data from 2007 in reading—Grade 4 and Grade 8. Grade 4 is on your left. The green bar is the difference between income groups, high and low SES [socioeconomic status], and the brown bar is the difference between English only and English language learners. As you can see in Grade 4, there's already a very striking distance in terms of income: almost a full standard deviation in terms of outcomes for lower income students and then almost a full standard deviation in terms of the differences between English only and English language learners in the fourth grade.



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The good news is as we move to Grade 8 toward the right: The differences in outcomes seem to diminish in terms of income. But, sadly, they seem to wildly increase in the later grades between English only and English language learners. So this again suggests that students, as I say in the next slide, are not getting the kind of oral language, especially academic language and vocabulary in English.

I think it would be very safe to say that a significant part of the achievement gap is the vocabulary gap. We know this is true not only for ELLs but [also] native English speakers. There has been a very, I think, underwhelming emphasis on promoting or building oral language proficiency. There's been a real focus, especially in the earlier grades, on cracking the code on decoding on reading and writing. But there has been a dearth of oral language development starting very early.

- A significant part of the achievement gap is a vocabulary gap (true for native English speakers and ELLs)
- English language development is a misnomer for many ELLs; little emphasis on promoting or building ORAL language proficiency
- Focus on decoding

Slide 11

Moving on to the particular challenges of reading comprehension, especially within and across content areas, we know that something happens in terms of the adolescent literacy crisis. We know that something happens in the middle grades. Researchers talk about, teachers talk about the lack of engagement and motivation. But what we do know is that there is a much greater language demand across secondary texts—particularly the vocabulary that occurs across science, social studies, math[ematics], and English texts—and that students are unfamiliar with specific academic vocabulary—the words that we know are necessary to learn and think and write and talk about academic subjects—words like *investigate* and *analyze* and *refer* and *claim* and *develop* and *interpret*. These are words that we assumed children know, but they don't. We have tested kids. They say they know these, and, in fact, they don't know what the word *interpret* means even though they've seen it may be 100, maybe 200, or maybe 1,000 times when they get to the middle grades. They do not know these words because these words are never explicitly taught.

So I would like to highlight here that this is the focus of Word Generation. It is to teach what some people call Tier II words, even though I'm not very thrilled with the framework because people start fighting about what tier words belong to. But these are the words that are not taught explicitly. They are the mortar words. They are the academic words necessary for learning and thinking. And they cross all content areas and do not get taught. So Word Generation focuses on these particular words.

We know that when we talk about vocabulary learning and teaching, there's a tendency to focus on the unusual, words like *defenestrate* or *sarcophagus* or *hollyhock*. Or, if you're a math[ematics] teacher or a chemistry teacher or a history teacher, you're going to be focusing on vocabulary and concepts like

Agenda

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Hypothesis: "adolescent literacy crisis"

- Something happens in the middle schools (engagement, motivation?)
- Greater language demands of secondary texts, particularly vocabulary that occurs across content area texts
- Unfamiliarity with specific academic vocabulary—the words necessary to learn and talk about academic subjects (*analyze, refer, claim, develop, interpret*)
- We tend to focus on the unusual (*hollyhock, sarcophagus*) or on discipline-specific vocabulary/concepts (*antichlorine, slope, isotope*)
- 12 learners navigate all of the above with the added burden of acquiring English and mastering grade-level content simultaneously

Slides 12 and 13

photosynthesis or Communist cell blocks or antebellum or slope or isotopes.

So the real focus here for this slide, which is the crux of the matter, is we are teaching through Word Generation the kind of academic vocabulary that never gets taught. We know that second-language learners navigate all these new language demands of secondary texts as well as instruction, with the added burden of acquiring English and mastering grade-level content simultaneously.

We know that poor comprehension outcomes in middle school are generally not a product of poor word reading but a lack of vocabulary in academic language. If you don't have the academic language that you're encountering in text, it certainly impedes [the] comprehension of these texts.

What we do know that occurs often is that second-language learners and even native English speakers can use their decoding and other skills to fluently read, and, this is in quotation marks, what are to them largely "incomprehensible texts." And they can even answer comprehension questions because of the way these question-answer routines are set up.

Second-language learners can seem proficient in English, especially if they are asked to decode and answer what is sort of the IRE format [initiation, reply, and evaluation]: I ask you a question, you give me the answer, especially if it's an easy one to pluck from a text.

In turn, my recommendation is, many recommendations are, that we need to build the kind of background knowledge vocabulary for students and really have true check-ins for comprehension with more meaningful interactions with text. Sadly we also know that this is

Poor comprehension outcomes in the middle school

- Poor comprehension outcomes in middle school are not necessarily a product of poor word reading, but a lack of vocabulary and academic language
- Lack of knowledge of the middle and lower frequency "academic" words encountered in middle and secondary school texts impedes comprehension of those texts

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By using decoding and other skills, students can fluently "read" largely incomprehensible texts and answer "comprehension" questions

- Second language learners can seem proficient in comprehension if questions or activities simply require them to "pluck" a satisfactory response from the text.
- Background knowledge, vocabulary, and real comprehension must be checked by more meaningful interactions with texts
- Fast-paced, low-level question answer routines are the norm in most classrooms serving ELLs (Zhang, Anderson, & Nguyen-Jahiel, 2009)

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very standard in ELL classrooms where fast-paced, low-level question-answer routines are generally the norm.

Our big claim is that in order to build the oral language proficiency and academic language necessary for ELLs to do well in school, we need the classroom discussion that provides them with opportunities for developing language skills that give them greater access to text, to ideas, to higher level thinking, as well as to participate in what we're calling national and international conversation.

So, really, a lot of these students, as well as low-income students, don't see themselves as participants in anything, much less read things they are asked their opinion about. That's sort of, again, the focus of Word Generation.

On the next slide, we're going to be now focusing our attention on the crucial role of discussion in promoting academic language. And some of you are very familiar with these studies.

There was a Gammoran and Nystrand study in 1991. It was a longitudinal study that showed the amount of time engaged in discussion in these classrooms was the strongest predictor of achievement scores in 16 middle and high schools. Then they did a replication study in 2003.

So they did a replication study, and they found the same impact of discussion-based approaches, this time in 20 middle and high schools. And they found, again, the predicted achievement scores, as well as they also looked at writing and it was vastly improved through discussion.

How do we build oral language proficiency/academic language in English for ELLs?

- We need classroom discussion that provides ELLs with opportunities for developing language skills that gives them greater access to texts, to ideas, to higher-level thinking, to participation in national and international conversations

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Academic Discourse

- Gammoran & Nystrand study, (1991) showed that the amount of time engaged in discussion was the strongest predictor of achievement scores in 16 middle and high schools
- Applebee, Langer, Nystrand & Gammoran, (2003) Replication study over a period of two years, looking at the impact of discussion-based approaches in 20 middle and high schools researchers found growth in abstraction and elaboration in writing (specifically about literature)

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But even with this overwhelming evidence concerning the role of discussion in academic achievement, they also found that classroom discussion was rare and brief, and it always has been. So they also replicated the findings that teachers are not engaging their students in discussion. Even in the higher track classrooms, only three and a half minutes [are spent in discussion]. But if you look at the low-track classes, it's just over a minute per [each] 60-minute class. We know that higher track students generally have the kinds of contexts and opportunities that provide them with a kind of language we know is necessary for academic achievement. But students, especially English language learners, in lower track classes are generally...basically they are school dependent for the kind of language that we know is associated with text comprehension and academic success. So we need to provide them with these kinds of opportunities, again, because they are school dependent for English.

Again, some of you are very familiar with these discussion-based reading programs. Some of these are pedagogical approaches: book clubs and literature circles, instructional conversations by Goldenberg (which is an ELL focus), and collaborative reasoning (which is pedagogical) have been used successfully not only with EOs [English-only learners] but also to develop ELLs' reading comprehension and develop their higher-order thinking skills. But, most importantly, they provide valuable opportunities for language development and improved reading conversations.

I just wanted to point this reference out to you. This is a study on language-rich discussions using the collaborative reasoning approach with English language learners. This was a study done with ELL fifth graders. And they found that even after just a four-week period with eight discussions in this open format, discussion-based approach, it resulted in not only improvements on listening and reading comprehension measures but

Evidence concerning the role of discussion

Classroom discussion is rare and brief
(Applebee, Langer, Nystrand & Gamoran, 2003)

| | Low track classes | Middle track classes | High track classes | Mixed classes |
|------------------------------|-------------------|----------------------|--------------------|---------------|
| Minutes of discussion/lesson | 0.70 | 1.44 | 3.30 | 1.42 |

And it always has been (Gamoran & Nystrand, 1991)

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Discussion-based reading programs/pedagogical approaches

- Book Clubs, Literature Circles, Instructional Conversations, and Collaborative Reasoning have been used successfully to develop ELLs reading comprehension and develop their higher order thinking skills
- These programs/approaches provide valuable opportunities for language development and improved reading comprehension

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Language rich discussions/CR with ELLs (Zhang, Anderson, & Nguyen-Jahiel, 2009)

- Found that over a four-week period (8 discussions), ELL fifth-graders who participated in the peer-led, open format discussion approach(CR) resulted in improvements on listening and reading comprehension measures as well as in the production of more coherent narratives with more diverse vocabulary and text evidence
- Doubled the ELL students' rate of talk

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also in the production of better narratives with more diverse vocabulary and text evidence. It doubled the ELL students' amount of talk. So the more opportunities that were provided for them with a structure resulted in gains all around.

So let's move on to Word Generation.

We came to this, as Peggie said, "Why did we develop this?" Well, we were asked to improve middle school literacy outcomes by our first field site partner, which was Boston. We looked at assessment data, and we interviewed teachers and did classroom observations. And it was clear that limited vocabulary knowledge was an obstacle to reading comprehension.

Together with teachers and researchers, we designed and developed a cross-subject vocabulary program with discussions as the primary focus for developing academic language in the middle school.

That was, I believe...it was 2006 when we first started. Now we are in many, many districts, and we are still with Boston as our first field site.

What we found with our observations in middle school, we found that vocabulary was not usually taught in middle school. If it was, it usually fell to the ELA [English language arts] teacher. Content-area teachers only taught their content-specific vocabulary and concepts.

We know that often vocabulary is reduced to word lists and word walls and memorization, which we know don't

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Why did we develop a discussion-based cross-content academic language program?

- SERP (Strategic Education Research Partnership) was asked to focus on improving reading comprehension at the middle school level by its first partner (Boston)
- Middle school teachers and administrators identified students' limited vocabulary knowledge as an obstacle to reading comprehension as did assessment data
- This led to the design and development of a cross-subject vocabulary program with **discussion** as a primary focus for developing academic language for the middle school

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Challenges to Vocabulary Instruction

Our initial classroom observations in multiple middle schools revealed that:

- Vocabulary is not usually taught in middle school
- If it is, usually falls on the ELA teacher
- If it's done, usually word lists and memorization
- In other content areas, vocabulary is content-specific
- Texts fail to engage adolescents
- Discussion is rare; IRE prevails

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work. We also found that a lot of the text that students were reading failed to engage adolescents. We also found that discussion, as per the two studies, was extremely rare, and that this IRE format—initiation, reply, and evaluation format—in classrooms as the teacher asking a question, the students answering, guessing what the teacher wanted. And then there was the evaluation. So there was very little in the way of discussion.

So we responded at three levels. We designed a program to focus on the students to build the vocabulary of middle school students through these repeated exposures to high-frequency words in and across all content areas.

We also wanted, for teachers, to promote the regular use of effective instructional strategies, especially for all content area teachers, not just the ELA teacher. And we also wanted to hit the whole school.

We wanted to facilitate the faculty collaboration on a schoolwide effort. So often what middle schools do is they adopt Word Generation whole school because everyone then is talking about the same thing, using the same words, [and] discussing the same controversial topics that is also the focus of Word Generation.

You're all very familiar with the instructional base for effective vocabulary instruction—the research base, I'm sorry. We know that students need multiple, intentional exposures to academic language and target words so they can learn them, acquire them, internalize them, [and] make them part of their own lexicon. Students need to hear these words used in varied contexts. And they need to have opportunities to use the words orally as well as in writing. But the oral piece has to be an organized discussion.

We're not against explicit language teaching. Certainly targeted direct teaching can be extremely effective.

How we responded: 3 levels

- Designed a program to:
 - Build the vocabulary of middle school students through repeated exposure to high frequency academic words in various contexts across all content areas;
 - Promote regular use of effective instructional strategies, especially the importance of **discussion** across all content area teachers;
 - Facilitate faculty collaboration on a school-wide effort (whole school adoption is highly recommended).

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Research base: Principles of Effective Vocabulary Instruction

- Students need multiple, intentional exposures to language/words for internalization
- Students need to hear and use high leverage words in varied contexts
- Students need opportunities to use the words in speaking and writing (organized discussion)
- Targeted direct teaching can be effective
- Imparting word learning strategies has long term effects

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Imparting word learning strategies, like teaching morphological analysis, has very long-term productive effects.

So this is what Word Generation looks like. The materials, we have, as Peggie mentioned...we have a website, wordgeneration.org. There are three years of materials: 24 weeklong units per year. This is sort of taking into account vacation and standardized testing.

Most schools who do this usually get through the 24 weeks. Each weeklong unit is focused on a set of five target words, which we selected from an academic word list, which is a corpus of the most frequently encountered words across content area texts. There's a website that shows you all these lists.

All of the activities are cross content. We were given 15 minutes a day by Boston because of their pacing guides—15 minutes a day, five days a week, which means that one teacher does one activity per week. And I'll explain a little bit more about that.

The tests are lexiled at the sixth-grade level. There are about 250 words per initial passage, which I'll show you in a minute.

The passages are written, again, to engage adolescents in high-level discussions on nationally relevant topics as well as on topics of great interest to this particular age group.

- Should there be federal funding for stem cell research? Kids have a lot to say about this even though they're 12.
- Should athletes be paid multimillion dollar salaries?
- Should amnesty be given to undocumented immigrants? When some of our immigrant students wrote about this, they would write two

Word Generation: Materials

- 3 series (3 years of materials)
- 24 week-long units, each focused on a set of 5 target words selected from the Academic Word List (AWL)
- Cross content activities: 15 minutes a day/5 days a week
- Texts written at 6th grade level
- Passages written to engage adolescents in high-level discussions on nationally-relevant topics as well as on topics that are of great interest to this age group
 - Should there be federal funding for stem cell research?
 - Should athletes be paid multi-million dollar salaries?
 - Should amnesty be given to undocumented immigrants?
 - Affirmative action and college admissions
 - Should you be able to own a pet?
 - Should there be curfews for teenagers?
 - Junk food: Should it be sold in schools?

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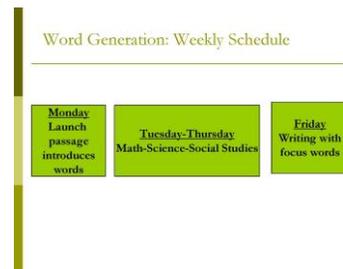
pages, while kids in other districts would have nothing to say about this. So it's clearly a matter about concerns and positioning.

- Should you be able to rent a pet is a big one. That's a real polemical moral dilemma for a lot of people.
- Should there be curfews for teenagers?
- Should junk food be sold in schools?

We have 72 separate topics. So you can also look at that on the website to see which one might... You can also boutique these units because they're all stand-alones; they do not build on one another. So you can actually create your own Word Generation if you'd like to make this for a lower age group or a higher age group.

So this is the simple, powerful design of Word Generation. It's up to the school to decide to come together in content area meetings and team meetings.

Essentially, what most people do is on Monday, the passage is launched. There are comprehension questions and an introduction to the words. Tuesday to Thursday can be anything. The math[ematics] teacher can do Tuesday, the science teacher Wednesday, and the social studies [teacher] can handle the debate on Thursday. Friday, any teacher can do because it's essentially students writing persuasive essays on what they've heard throughout the week, [for example,] taking a stand on stem cell research or amnesty for undocumented immigrants.



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This is what a passage looks like. Let's say this is the very first day of the week. Usually an ELA teacher launches this, but it can be anyone. This is the passage, "Should the government fund stem cell research?" As you can see, there are five focus words.

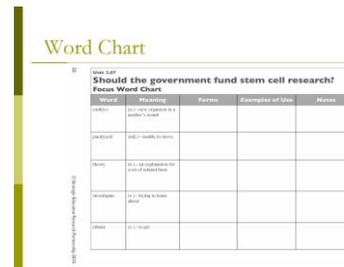


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We started off with an anecdote. This actually happened in Boston. There was a drive-by shooting, sort of setting up the stage. Then we have a pro and we have a con, and we ask them what they think about this. We embed the five target words in the passage, which is about 250 words long, and then ask a few comprehension questions.

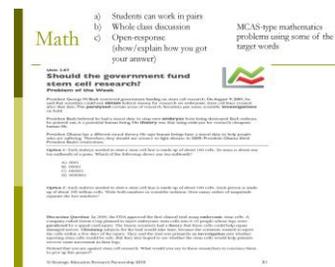
Now that often takes a little more than 20 minutes, especially when you first get started. But most people that we work with say that it is very doable.

This is sort of a word chart for students to take notes and keep a tally of what they're learning about word families and new examples of use, may be polysemous (multiple-meaning) words, et cetera.



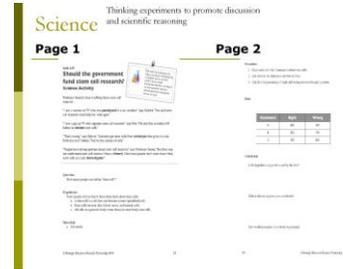
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This is the math[ematics] problem where we embed the target words of the week and building on the topic itself: "Should the government fund stem cell research?" We were asked to do this by the math[ematics] teachers to sort of give test prep on word problems, but also we include discussion questions to continue the discussion-based approach.



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We have a science thought experiment. Fifteen minutes is too little time to do anything experiential, so we basically have thinking experiments to promote not only discussions but also the language of scientific reasoning.



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On Thursday, we suggest having a debate. We hand out four positions; sometimes it develops into two. But you can create any kind of discussion format for this, so the kids actually get to talk about the topic and use the language that we're trying to teach.



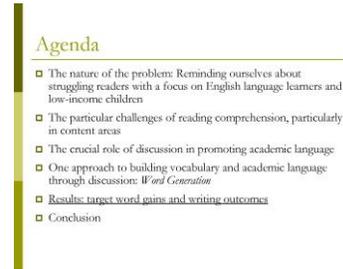
Slide 33

Finally, on Friday, we have a writing prompt.



Slide 34

We have more recent results, and I would like to maybe offer up some—to Peggie who will forward to all of you or be able to post these online—links to some of the articles and studies that are more recent.



Slide 35

These are sort of from the preliminary year when we had two pilot schools, and they did this [in] sixth, seventh, and eighth grade. One of these was very high performing; one was not so high performing. But what we like to sort of point out is that there were gains in both schools, but to point out that the sixth grade on the posttest was sort of outperforming in both schools the eighth graders.

Multiple Choice Test Results

| Grade | n | Mean percent Correct 1 st 12 week words | |
|---------|-----|---|-------|
| | | Pre | Post |
| W Six | 29 | 65.09 | 77.82 |
| W Seven | 46 | 68.20 | 82.75 |
| W Eight | 64 | 74.67 | 85.02 |
| R Six | 104 | 68.28 | 77.02 |
| R Seven | 199 | 72.24 | 79.04 |
| R Eight | 120 | 75.03 | 83.36 |

S E R P

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| R Eight | 120 | 75.03 | 83.36 |

S E R P

Slides 36 and 37

In the second year of our project here, we also had a quasi-experimental study where, again, the treatment schools outperformed the comparison schools even though they were much more higher performing at the base.

Year 2 results

| | Pretest | | Post test | | Gain |
|------------------------------|---------|------|-----------|------|------|
| | Mean | SD | Mean | SD | |
| □ Comparison (n= 294) (5) | 21.02 | 6.30 | 22.97 | 7.15 | 1.95 |
| □ Treatment (n=652) (5) | 18.53 | 6.17 | 22.93 | 7.33 | 4.4 |

40 items... represents 41 word gain. Target (25). Indicates that approximately 14 target words through participation in all the weekly activities, students who gained more words also did better on the 12-35.

Slide 38

What I really wanted to point out is...this is a study that Catherine Snow and Josh Lawrence and I did. What we found was that students who spoke a language other than English at home improved, more than monolingual English students, on measures of target word knowledge. And we believe this is because of the focus, the opportunities for hearing these words and using them in speech and reading them as well as having opportunities to write with them. The discussion opportunities for ELLs seem to promote greater gains for them as well as improved writing.

Descriptive statistics also suggest that students who spoke a language other than English at home improved more than monolingual English students on measures of target word knowledge (Snow, Lawrence, & White, 2009)

| | Students who speak a language other than English at home | | | | Students who speak English at home | | | |
|-------|--|----------|----------------------|----------|------------------------------------|----------|----------------------|----------|
| | Comparison School (n= 452) | | WG School (n=292) | | Comparison School (n = 368) | | WG School (n=418) | |
| | Pretest | Posttest | Pretest | Posttest | Pretest | Posttest | Pretest | Posttest |
| Mean | 21.30 | 23.58 | 18.98 | 22.36 | 21.57 | 23.61 | 18.30 | 22.87 |
| SD | 6.40 | 6.84 | 6.46 | 7.08 | 6.81 | 7.36 | 6.45 | 7.12 |
| Gains | 2.28 | | 3.38 | | 2.04 | | 4.57 | |

Slide 39

Discussion/Debate and Writing Outcomes (WG)

The more English language learners hear academic language and use them in debates and classroom discussion, the more these all-purpose, fly-under-the-radar, high leverage words, appear in their writing.

So we also have a couple of studies that really show that the more English language learners hear academic language and use them in these debates and classroom discussions, the more these very all-purpose, what people call Tier II, but we're calling...this very lengthy...These are the words that don't get

taught, so we're calling them all-purpose, border words, fly under the radar, high-leverage words. The more they hear them in discussion and debate, the more they appear in their writing.

So we do have a writing study from a few years ago that showed that, on average, two of the five target words were used in ELL weekly essays, and, on average, 10 past target words were used. This was actually done in a study in some fifth-grade classrooms. So words like *impact* and *analyze* and *conflict* and *benefit*, as you can see, were used 50 times after the word was introduced. A word like *analysis* or *analyze* was used 40 times after. So these are words that kids never used or uttered before, and now they're appearing in their discussions as well as in their writing.

What was really interesting is most of the growth occurred during the last 10 weeks of the intervention. So, again, it takes a while, not only to hear...[but also] to internalize the words over time. All of this was also practice effect; there was no instructional guidance around writing.

Slide 40

Do students use (and re-use) the target WG Words in their Writing?

- On average, 2 of the 5 target words were used in the weekly essays
- On average, 10 past target words were used across the intervention

Top 4 Learned Words

- **impact** (used 50 times after it was introduced)
- **analyze** (used 40 times after it was introduced)
- **conflicted** (used 33 times after it was introduced)
- **benefit** (used 21 times after it was introduced)

Slides 41 and 42

Writing Quality Results

- Interestingly... most of the growth occurred during the last 10 weeks of the intervention:
 - First 10 weeks = .03 (or .58 points)
 - Second 10 weeks = .04* (or .81 points)
 - Practice effect only (no instructional guidance)

Slide 43

Part 2

DR. WHITE:

I just want to conclude with saying that managing a good discussion is a very difficult thing to do, and it's not usually part of teacher repertoires. We also know that this is a skill that's not prioritized on state standards or in teacher training programs or through certification procedures, although I would like to point out that effective communication and discussion is now part of the Common Core [State] Standards. Teachers will be evaluated on how well students can hold discussions and how well they present themselves and use academic English. We know that learning to do so is very possible, but I think there needs to be a lot of professional development around developing expertise in managing discussions at whatever age.

But what we did find, teachers who participated in our various studies really are impressed by the sophistication of students' ideas. They seem very, very surprised often that children have such depth and passion about these topics. We asked students and they were very engaged, and they valued the opportunities for this kind of talk, especially in the more student-centered topics, although they were also very engaged in debates around FDA [Food and Drug Administration] and genetically modified foods and doctor-assisted suicides and federal funding for stem cell research.

So they take themselves very seriously and love being part of this national conversation. ELLs wrote very impassioned essays on units that spoke to the immigrant experience and second-language learning. Should English be the official language of the United States? Et cetera. And the word *amnesty* was the top-scoring word on the target word measure in one of our very large immigrant communities. And the essays were the longest as well.

Agenda

- The nature of the problem: Reminding ourselves about struggling readers with a focus on English language learners and low-income children
- The particular challenges of reading comprehension, particularly in content areas
- The crucial role of discussion in promoting academic language
- One approach to building vocabulary and academic language through discussion: *Word Generation*
- Results: target word gains and writing outcomes
- *Conclusion*

Side 47

Serendipitous discoveries from WG classroom discussion and debates...

- Teachers are impressed by the sophistication of students' ideas
- Students value the opportunities for discussion, especially of more student-centered topics although students were passionately engaged in debates around genetically modified foods and doctor-assisted suicide and federal funding for stem cell research
- ELLs write impassioned essays on units that spoke to the immigrant experience, second language learning, amnesty was the top-scoring word on the target word measure
- Struggling readers have a new venue from which to present themselves newly as academic, political, and social actors

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The most wonderful part about being in classrooms where Word Generation is taking place, where kids are on IEPs [individualized education programs] and they flunked a couple of grades and they're larger than the other kids, is to see them—those who struggle with reading and writing—they stand up and articulate their views and their positions on very important matters. And then this gives them kind of a newfound identity—an academic identity, a political identity—seeing themselves anew. So that's a really wonderful thing to observe in classrooms.

I just wanted to conclude that we think engaging in Word Generation discussion-based weekly activities across content areas can certainly improve target word learning for second-language learners on measures that we've used, as well as the use of this language—these words—in persuasive essays.

But also, and most importantly, embedding discussion-based classroom activities as well as systematic vocabulary instruction schoolwide has the greatest potential to accelerate the reading achievement of English language learners.

I just wanted to quickly update that we received a very large IES [[Institute of Education Sciences](#)] grant to modify Word Generation for Grades 4 to 8. We've just finished Grade 4 [and] piloted it this year with great outcomes and enthusiasm. We're writing the fifth grade as we speak. We're writing social studies and science in-depth units, and we're embedding more discussion. There are about six units for Grade 4 on the [wordgeneration.org](#) website under more developments or new developments.

I just want to point out that in these free and downloadable materials, you can also find all of the units translated into Spanish. And, again, Word Generation is free and downloadable. We're a nonprofit

To conclude..

- Engaging in WG discussion-based weekly activities across content areas can improve word learning for L2 learners on target word measures and their use in persuasive essays
- Embedding debate and discussion-based classroom activities as well as systematic vocabulary instruction school-wide has the greatest potential to accelerate the reading achievement of low-income children and especially English language learners
- Update: IES grant to modify WG for grades 4-8; more discussion
- Word Generation has been translated into Spanish
- Word Generation is free and downloadable: [wordgeneration.org](#)

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organization. So all you have to do is print them and figure out professional development. But I just wanted to make sure you had the wordgeneration.org website.

I would like to thank you for this opportunity. My contact information is right here. So, I'm done. I don't know if I've gone over the time or not. But I'm wondering if there are questions considering how quickly I just whipped through that.

PEGGIE:

You did go pretty rapidly, but it was really wonderful information. Thank you, Dr. White. I think you really shared a lot of wonderful information with us and fabulous resources that are available for educators in the field to help improve vocabulary and discussion and outcomes for not only English language learners but [also] all of our students that are struggling with reading. So thank you for sharing these wonderful materials with us.

DR. WHITE:

Thank you very much.

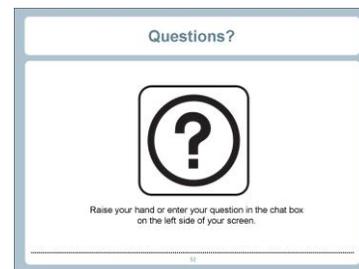
PEGGIE:

I have just a couple questions to get us started. If anyone on the webinar has a question, you can either enter it in the chat or, if I muted you, you can push star six on the phone to unmute, and you can speak up over the phone.

So I'm just wondering a little bit about your sites. Where you're located, and if people were interested in being sites, is there any possibility for adding sites to the grant?



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DR. WHITE:

We are finishing up an IES grant in San Francisco, Pittsburgh, and Baltimore—a previous IES grant. We now have this very large IES grant. We are partnered with Boston [and] another district in Massachusetts. And we’re partnering with four schools in Washington, D.C., as well as all of Baltimore.

Right now, because it’s longitudinal, we were trying to get...And it’s a five-year study. We were trying to get sort of stable districts over time.

So, I think it’s more down the line. This new grant, we’re sort of trying to establish. We’ve already established three of these districts and just added Washington, D.C. I’m not sure because I’m not the project director. But I can certainly, if anybody is interested in participating in any kind of...We do research and development. As a nonprofit, we’re always interested in partnering with districts. But at this point in time, I’m not so sure that we have those opportunities—possibly in a few more years.

PEGGIE:

Great. I just wanted to throw that out there because I thought it might be a question some people might have.

Denise is asking, “Are there certain words that K–3 should be focusing on to help with the upper grades?” Are there some resources you might direct her to, to help her answer that question?

DR. WHITE:

Well, I just presented on K–3 Word Generation because, again, I think that these words that we’re talking about, you might find a few that are not—the topics are not relevant for these early grades. But certainly these words appear and can appear or you can make them part of your informational text presentations or discussions with students.

I was looking over some of the science books from National Geographic for first grade, for example. And I found them somewhat lacking in terms of...they called air and water content words. Most of the language was very simplified; it was very picture focused. I think that talking to kindergartners all the way up to the third grade, these words can be used in narrative and informational text. They can certainly be used in activities.

So I'd be happy to send Denise the presentation I gave to the K-3 teachers that I worked with on building academic language in the earlier grades. I'd be very happy to further that and give her some more recommendations.

PEGGIE:

Great. I will send you Denise's e-mail address, and then you can make that connection. Thank you for making that offer.

DR. WHITE:

Sure thing.

PEGGIE:

And Denise said that would be great.

Are there other questions that people have over the phone? Would anyone like to speak up with a question? [Pause] Okay. If anyone has a question, you can either raise your hand with the little guy on the top and I can recognize you, or you can always enter in the chat.

It looks like Theresa is typing right now, so we'll let her finish typing.

I had another question about professional development. So with the sites that you worked with, did you offer any professional development for the teachers in these schools?

DR. WHITE:

We started off very, very small. Katherine and I and a couple of writers created the Word Generation program. I did all the professional development up to...Katherine would do a lot of it. I did most of it that was local. So that's what I've been doing for the last four years essentially is giving free professional development because we were working with our study site. So this was sort of part of the bargain.

The big issue is when the website is actually supposed to provide enough of the research base, videos, transcripts, [and] presentations to teachers so they can actually use the website as a professional development tool. Sometimes I do certainly do a lot of professional development. Still, now with this new grant, the model is now with our study districts. We have a very formative professional development focus through our coaches. We have two coaches for Massachusetts, and we have two coaches for the Baltimore site. These coaches meet with the study teachers every week and provide modeling and lesson planning and professional learning communities. But, generally, a lot of folks just take this on themselves because a district wants it or a classroom is interested or an ELL group wants it.

We're not a professional development organization, but we often go out and give a presentation on what Word Generation is and what it would mean for it to become part of your school. But in terms of long-term professional development, we basically are a very, very small operation, and we do the research development. What we want to do is make this free and available to the public, but we don't really have the resources to provide the kind of professional development that we would wish.

PEGGIE:

You've certainly provided some wonderful resources on your website, and I really encourage all of the

participants to really explore that website during your summer vacation and maybe use it in fall professional development or later this summer at your charter school.

It's also a wonderful opportunity. Sometimes ELL specialists are very separated from content specialists, so this is a really wonderful opportunity to start professional learning communities about addressing the needs of all kids where content and language teachers are working together.

DR. WHITE:

Absolutely. Very good point. Very good point.

PEGGIE:

Theresa, did you want to speak up? Does anyone else have a question over the phone?

THERESA:

It's not a question but a comment. I think this is a great resource for teachers.

What are some of, perhaps, the professional reading we need to provide to our teachers before we can prepare them to make the shift from traditional teaching of vocabulary where you just teach a word list per week without any connection to any content and moving down to this vocabulary-rich instruction?

DR. WHITE:

There are many, many resources, and I don't know what has been most recently posted on our website in terms of the resources that we provide—the studies and reports that are out. I think that the hard part, Theresa, is how do you move teachers who...It's through no fault of their own, [they] go into this default position or approach that they were trained in, that they were instructed in, and they were schooled in. It's very difficult to relinquish control and sort of allow this very

new, strange format of discussion to take place. I think the big issue is fear and not knowing how to manage and structure these conversations.

I mean, I've done professional development training a lot, and I always ask people if they've ever been trained to organize, structure, manage a classroom conversation or discussion in their teacher training programs, and there's been one in thousands of people that I've spoken to.

So I think it's really about sharing...I don't know if you know Cathy O'Connor's work on accountable talk, sort of developing a community of accountable learners, the kind of norms for discussion that should be in place at the very beginning of the year.

There are great resources. The real issue is how do you get your staff internally to understand the power of discussion and then sort of...I think a big thing we're having right now with our own sites is, "How do teachers gauge how much their own classroom discussions have impacted outcomes on standardized tests or on writing?"

It's kind of amorphous. We know that it predicts and impacts, but to get teachers to that point where they use discussion on a daily basis for vocabulary learning, for academic language learning, what we find in most classrooms is there's an issue of management. It's very individual. It's a lot of independent work. So this whole idea of creating structures for paired discussion, small-group discussion, whole-group discussion—those are very frightening to a lot of teachers.

This is why we have coaches that sort of move teachers along the way. I would encourage you [that] if there's anything on accountable talk or on managing discussions or how to promote oral language proficiency in your English language learners, that you

bring that to your school in terms of professional development opportunities because it really is sorely missing.

THERESA:

Okay, thanks.

DR. WHITE:

Sure.

PEGGIE:

Great. Thank you, that was a very detailed response.

In response to what you were saying about assessments, it seems like with the implementation of the Common Core [State Standards], that, in fact, this kind of training would be really helpful to help kids really navigate complex text and look for evidence and do the kind of reading and writing that the Common Core requires. Would you like to comment on any connections that you might see between the Common Core and Word Generation?

DR. WHITE:

Well, actually, Katherine just e-mailed me about that. Can I just look at what she said about it?

PEGGIE:

Yeah.

DR. WHITE:

Is there a way for me...I can actually go into my...Will you see my e-mail if I bring it up?

PEGGIE:

I can...

DR. WHITE:

No, it's okay if you do.

PEGGIE:

I can give you control? [Inaudible] May be you can just read it to us? Is that okay?

DR. WHITE:

You basically just sort of summarized what Word Generation almost sort of preceded the Common Core [State] Standards. So I think you're absolutely right.

I sort of always highlight the focus on argumentation and effective communication and presentations. But in terms of reading complex text, having multiple opportunities for discussion, and writing about these texts, and proving it's sort of having true, deep reading comprehension...I mean you basically summarized how we think this mirrors and works very closely—mirrors many of the Common Core Standards.

PEGGIE:

Maybe even another argument that people can use when they're talking to their school leaders...that this might be something that could really help us with implementation of the Common Core.

DR. WHITE:

Absolutely.

PEGGIE:

There's lots of wonderful materials that are out there already ready to go and teacher tested. So that's another sort of reason to implement this if it's at all possible in your charter schools.

DR. WHITE:

Absolutely. And because it's free, and when people say it's just one more program, essentially it really is sort of a set of instructional tools that can travel—that can be used throughout the instructional day.

This is not a huge decision because...to adopt Word Generation should not be one of those major upheavals in a school when a decision to adopt a curriculum usually takes a huge amount of money and a huge amount of agreement. This takes so little time to do and to implement in the grand scheme of things. It's 15 or 20 minutes a day per teacher.

I think it's very hard to say that...A lot of folks say we don't have enough time. This is a very short amount of time with a very big bang for the buck. I think it not only reflects the Common Core Standards, but it also is free and it's efficient and its effective and it is not disruptive. I think there are all sorts of pluses to the program.

PEGGIE:

Great. Other questions from participants? You can either enter them in the chat or speak up. [Pause] Don't be shy. Okay, if anyone wants to speak up, please let me know.

I guess I have one more question about your lessons learned over time. If people are going to be implementing in the schools, are there some lessons learned as you've implemented this about what works, what doesn't, things people should watch out for, particular training they should provide or recommendations you might make?

DR. WHITE:

I should have added a couple of slides for caveats and what our participating teachers and administrators have said about the power of Word Generation as well as what you need to think about before implementing. And this is also in videos on the Web. So if a principal

wants to hear what Andrew Bott says about what it meant for him to bring Word Generation to his school, what needed to be in place, the kind of buy-in that you need...because you need to buy-in not about the materials themselves but really about the problem.

The issue affecting us is the fact that kids can't comprehend what they read because they lack academic language and vocabulary. And this is a response to it. So he gives a lot of recommendations for administrators. There are teachers who talk about...be sure to have this, make sure this occurs, make sure you establish norms early on.

There are many lessons learned on the Web, but I can certainly send a compilation of those in a couple of slides to you which can be also shared. I don't know if you have a ListServ, but I can also post those on the Word Generation website so other people can access that particular presentation about lessons learned. Maybe I could rename a PowerPoint presentation or put a Word document up about lessons learned by administrators and teachers.

I think it's really on almost a commitment ceremony that people have to have about the problem of practice that they're going to work on, which is to build discussion throughout the school and throughout the content areas, because we know this is a vehicle that will promote the language we know these students lack.

The big issue is math[ematics]...Well, one of the lessons I've certainly learned when I talked to teachers, it's usually that the math[ematics] and science teachers are on the fence, if not really almost...I wouldn't say hostile, but there's often pushback from math[ematics] and science teachers who don't feel it is their position or that they don't feel that they're the ones that should be teaching the kind of language that they feel should be

taught by the ELA teachers. But if you point out to them that a lot of ELLs know...

There's a great dissertation—Maria Martiniello who's at ETS. She wrote a very powerful dissertation about English language learners and standardized tests. She did an analysis, and basically she found that interviewing many, many ELL students about their performance on the MCAS [[Massachusetts Comprehensive Assessment System](#)], our standardized test, it turned out the ELLs actually knew the mathematical concepts, they did get the answers right if the language had been taken away. The cultural references, the way the language and the vocabulary within these word problems are what trip ELLs up, not the math[ematics] itself.

So the more that students understand the word problems, the ELLs understand the math[ematics] problems, clearly they can really show what they actually know and can do. I think really convincing the math[ematics] and science teachers about the importance of teaching these words that cross content areas is vital.

PEGGIE:

Wonderful. Thank you. So I'm going to give everyone one more long awkward wait-time pause to ask any questions you have. You can speak up over the phone or enter a question in the chat. [Pause]

Okay. So I think I'm going to go ahead and close out the webinar. Dr. White, thank you so much. This was really a wonderful webinar, and you shared some incredible resources with the charter school educators who joined us today. So thank you for taking the time to do that. We know you're incredibly busy.

DR. WHITE:

Thank you very much. It was a pleasure.

PEGGIE:

Great. And thank you to all the participants who joined us. We appreciate all of the time you've spent with us.

Several of you have come back to several of the ELL webinars, so we appreciate your participation. The webinar will be archived within three business days at the website that you see on your screen.

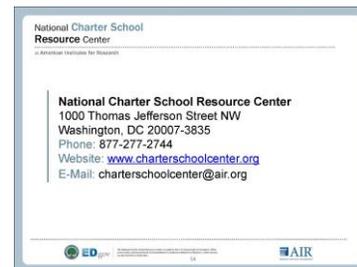
I'm going to send you to an evaluation in a moment if you have some feedback you'd like to share with us, we certainly appreciate your feedback, and we look forward to your participation in future Resource Center webinars. Thank you everyone for joining us and enjoy the rest of your afternoon.

DR. WHITE:

Thank you. Goodbye everybody.



Slide 53



Slide 54