

EFFECTIVE INSTRUCTION FOR ADOLESCENT STRUGGLING READERS

Professional Development Module

Second Edition





EFFECTIVE INSTRUCTION FOR ADOLESCENT STRUGGLING READERS Professional Development Module

Second Edition

FACILITATOR'S GUIDE

Christy S. Murray, Jade Wexler, Sharon Vaughn, Greg Roberts, Kathryn Klingler Tackett The University of Texas at Austin

Alison Gould Boardman University of Colorado at Boulder

Debby Miller, Marcia Kosanovich Florida State University



This publication was created for the Center on Instruction by The Meadows Center for Preventing Educational Risk at The University of Texas at Austin.

The Center on Instruction is operated by RMC Research Corporation in partnership with the Florida Center for Reading Research at Florida State University; Instructional Research Group; the Texas Institute for Measurement, Evaluation, and Statistics at the University of Houston; and The Meadows Center for Preventing Educational Risk at The University of Texas at Austin.

Editorial, design, and production services provided by RMC Research Corporation.

Preferred citation:

Murray, C. S., Wexler, J., Vaughn, S., Boardman, A. G., Roberts, G., Tackett, K. K., Miller, D., & Kosanovich, M. (2010). *Effective instruction for adolescent struggling readers: Professional development module facilitator's guide—Second Edition.* Portsmouth, NH: RMC Research Corporation, Center on Instruction.

The Center on Instruction and the U.S. Department of Education retain sole copyright and ownership of this product. However, the product may be downloaded for free from the Center's website. It may also be reproduced and distributed with two stipulations: (1) the "preferred citation," noted on this page, must be included in all reproductions and (2) no profit may be made in the reproduction and/or distribution of the material. Nominal charges to cover printing, photocopying, or mailing are allowed.

Copyright $\textcircled{\mbox{\scriptsize C}}$ 2010 by the Center on Instruction at RMC Research Corporation



ACKNOWLEDGMENTS

We wish to thank to following colleagues for their valuable advice and support in the preparation of this document:

Jan Dole, Michael Graves, Lauren Liang, Stuart Greenberg, Vicki LaRock, Stacey Joyner, and Dee Braley.

The image of Mt. St. Helen's on page 27 is a work of the U.S. Federal Government and is in the public domain.



CONTENTS

1 USING THIS PROFESSIONAL DEVELOPMENT MODULE

- 2 Objectives
- 2 Professional development content
- 4 Delivery
- **5** Preparing for professional development
- 11 FACILITATOR RESOURCES AND PARTICIPANT HANDOUTS
- 42 APPENDIX: A USEFUL COMPANION: ALIGNING Bringing Literacy Strategies into Content Teaching WITH Effective Instruction for Struggling Adolescent Readers—PD Module



USING THIS PROFESSIONAL DEVELOPMENT MODULE

Effective reading interventions for students struggling in the early grades have been a focus of considerable research over the past 20 years (Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Foorman & Torgesen, 2001; Geva & Siegel, 2000; Klingner & Vaughn, 1996). Comparable research targeting older struggling students has only recently started to develop, partly in response to recent data suggesting that one in three fourth-grade students is reading below a basic level and only 31% of eighth graders are proficient readers (Lee, Grigg, & Donahue, 2007). State, district, and school leaders are motivated to improve the literacy skills of older students, and need materials and support that link the available research to improved teacher practice.

This professional development package¹ is designed with that need in mind. It is part of a suite of materials that also includes *Interventions for Adolescent Struggling Readers: A Meta-Analysis with Implications for Practice* (Scammacca et al., 2007), and *Effective Instruction for Adolescent Struggling Readers: A Practice Brief* (Boardman et al., 2008). A Training of Trainers (TOT) PowerPoint has also been designed to train others to facilitate presentations of this module (abbreviated here as EIASR-PD). It contains presentation guidelines and suggestions for customizing the PD for different audiences.

All materials in this suite have been aligned with Academic Literacy Instruction for Adolescents: A Guidance Document from the Center on Instruction (Torgesen et al., 2007) and Improving Adolescent Literacy: Effective Classroom and Intervention Practices: A Practice Guide from IES [Institute of Education Sciences] (Kamil et al., 2008). These two documents examine the current research base; make recommendations for improving academic literacy instruction for students in grades 4–12, including students reading below grade level and English language learners (ELLs); offer advice from experts on improving adolescent academic literacy; and showcase examples of successful state activities in improving adolescent academic literacy. A facilitator of the EIASR-PD should be well-grounded in *both of these documents*, as well as the Center on Instruction's meta-analysis and practice guide mentioned above.

¹ This 2010 version of the professional development module is a revision of the 2008 version. The revision presents information based on findings from *Interventions for Adolescent Struggling Readers: A Meta-Analysis with Implications for Practice* (Scammacca et al., 2007), and recommendations discussed in *Improving Adolescent Literacy: Effective Classroom and Intervention Practices: A Practice Guide* from IES (Kamil et al., 2008).

The EIASR-PD also complements another COI publication, *Bringing Literacy Strategies into Content Instruction: Professional Learning for Secondary-Level Teachers* (http://centeroninstruction.org/files/Bringing%20Literacy% 20Strategies%20into%20Content%20Instruction.pdf). Many of the vocabulary and comprehension strategies described in *Bringing Literacy Strategies into Content Instruction* are treated in more detail and with a tighter focus on supporting struggling students in the EIASR-PD. A chart of these literacy strategies and the corresponding EIASR-PD slides appears on page 42.

This *Facilitator's Guide* supports the delivery of the EIASR-PD PowerPoint presentation. It contains materials lists and other information as well the handouts used with participants during the professional development.

Objectives

The EIASR-PD is intended as one set of tools in a larger, ongoing professional development effort to improve educational outcomes for adolescent students struggling with reading. Technical assistance providers, state departments of education, and local districts and schools can use this professional development to:

- enhance participants' understanding of *selected* research-based instructional practices associated with positive effects for adolescent struggling reader, and
- teach participants how to implement these research-based practices.

Professional development content

This professional development consists of 149 slides divided into six sections: *Introduction, Vocabulary, Reading Comprehension, Motivation and Engagement, Intensive* and *Individualized Reading Interventions* (with a focus on word study instruction), and a concluding portion, *Putting it All Together*. The sections are placed in this order to distinguish the reading instruction that *all* adolescent readers need (vocabulary, reading comprehension, and motivation and engagement) from the reading instruction that *some* adolescent students need (intensive and individualized interventions, including word study).



Fluency is not specifically discussed in this professional development. Currently, adequate research does not exist to support specific instructional strategies in fluency. When additional research becomes available, the Center on Instruction will develop guidance on fluency instruction for struggling adolescent readers. (See slide 12 for more information.)

Participant Practice Activities (PPAs) are embedded throughout the professional development. They are designed to make the professional development more interactive, provide participants with hands-on application of skills, and encourage discussion. For more information, see Facilitator Resource 2: Overview of the Participant Practice Activities (PPAs), page 15.

Brief **video clips** from the Doing What Works website (dww.ed.gov) are also embedded near the beginning of some sections of the slide presentation; they provide an overview of the relevant content. If the facilitator chooses to show these clips he or she will need a high-speed Internet connection.

A few **highlighted research studies** from the Center on Instruction's metaanalysis are also presented to illustrate high-quality research standards and effective instructional strategies as delivered by researchers in the studies.

Detailed speaker notes accompany each slide. Boldface and colored text are used throughout to assist the facilitator.

- Text excerpted from slides is presented in **bold** to help facilitators navigate the notes.
- Text in red indicates further information for the facilitator (e.g., "optional activity is described below").
- Text in red surrounded by brackets indicates a directive for the facilitator (e.g., "<<Give participants 2 minutes to discuss at their tables>>").
- Text in green indicates instructional examples that the facilitator can use to extend participants' knowledge (e.g., "In a 7th-grade Social Studies class, teachers may ask students to engage in small-group discussions to gain experience using new vocabulary words").

Slides are organized as follows:	
Introduction	Slides 1–14
Vocabulary	Slides 15–40
Reading Comprehension	Slides 41–91
Motivation and Engagement	Slides 92–107
Intensive and Individualized Interventions	Slides 108–143
Putting it All Together	Slides 144–149

Delivery

Facilitators for EIASR-PD should be chosen based on their knowledge of reading in the upper grades, their experience in providing effective instruction to adolescents with reading difficulties, and their ability to communicate effectively with peers. Due to the large number of slides and the relative breadth of the speaker notes, facilitators will need to review all materials before delivering the module. This can be done individually or in collaboration with other facilitators. An EIASR-PD Training of Trainers PowerPoint is also available from the COI website to help you prepare to deliver this material.

There are several options for delivering EIASR-PD. Suggestions for a one- or two-day format are shown below.

One-day format

Morning	Afternoon
Introduction—30 minutes	Motivation and Engagement—30 minutes
Vocabulary—60 minutes	Intensive and Individualized Reading
Reading Comprehension—90 minutes	Interventions—60 minutes
	Putting It All Together—15 minutes

The one-day format is appropriate for teachers, administrators, and district or state staff members with advanced knowledge of reading in the upper grades and who can absorb the information at a relatively fast pace. This format represents a refresher and provides an overview of the research and related instructional strategies. The times allotted for each section are merely guides and should be adjusted according to a group's prior knowledge of adolescent reading, its informational needs, and available time.



Two-day format

Day one	Day two
Introduction—45 minutes	Brief review of day 1—30 minutes
Word Study—90 minutes	Motivation and Engagement—45 minutes
Reading Comprehension—two hours	Intensive and Individualized Reading Interventions—90 minutes
	Putting It All Together—30 minutes

The two-day format is appropriate for teachers, administrators, and district or state staff members with some or little knowledge of effective reading instruction for adolescents. They may have had limited exposure to research and may need additional practice implementing the recommended strategies during the sessions. Spreading the professional development sessions over two days will allow for a slower pace, more modeling of activities and examples, and opportunities for participants to develop a deep understanding of effective instruction.

Ideally, the EIASR-PD sessions would be scheduled before the beginning of a school year, but could also be scheduled during ongoing in-service days during the school year.

Furthermore, the content of the professional development can be *tailored to participants' needs and interests* and used with a wide range of professionals, including teachers, administrators, researchers, LEA staffs, SEA staffs, and other technical assistance providers. In general, this professional development module can be customized by altering (a) the order of the sections, (b) the

time spent and emphasis placed on each section, (c) the emphasis placed on research findings and study design, and (d) the time allotted to modeling strategies and offering instructional examples. For specific suggestions for tailoring the PD to various audiences, see Facilitator Resource 1: Customizing Professional Development for *Effective Instruction for Adolescent Struggling Readers—Second Edition*.

Preparing for professional development

Successful delivery of professional development requires detailed planning. Use this guide and other resources available for free download at www.centeroninstruction.org during your preparation.

- **Determine the number of participants.** This professional development can be conducted with any number of participants.
- Advise participants to bring a textbook unit or novel chapter that they plan to use in their classroom soon. This will be used during Participant Practice Activity 2 in the Vocabulary section.
- Secure a convenient location for the training. The room should be large enough to accommodate the scheduled participants comfortably. A large audio-visual screen at the front of the room will be necessary, as will a high-speed Internet connection if the facilitator chooses to show the video clips.
- Position tables (one per six participants) so that all participants can see the projection screen. Allow enough space among tables so that discussions at each table are relatively undisturbed.
- We recommend that presenters use two tables at the front of the **room.** These tables will hold the laptop computer, LCD projector, overhead projector, and other materials needed throughout the training (see Tables 1 and 2 on the next page).
- Before the training, load an electronic copy of the PowerPoint presentation on the computer that will be used during the professional development. Attempting to present the PowerPoint directly from the website will result in poor broadcast quality.
- Set up the LCD projector, screen, and laptop, and check all equipment before participants arrive.
- Check sound quality. Use a microphone if the audience is large.
- Before the training, make copies of the PowerPoint slides and the ten handouts for participants. The reproducible handouts are found at the end of this *Facilitator's Guide*. It may be helpful to use different colored paper for each section of the training (Vocabulary, Reading Comprehension, etc.). Give copies to participants at the beginning of the training.
- Gather resource materials and supplies necessary for each day's activities.
- Place supplies in the center of each table.



Table 1: Equipment

Equipment	Quantity	Purpose
Laptop computer	1	Run the PowerPoint
LCD projector	1	Project the PowerPoint
Overhead projector	1	View transparencies
Large screen	1	View the PowerPoint
Microphone(s)	One per facilitator and possibly one for participant questions if audience is large	Facilitate communication during training
Speakers	Two speakers or one house sound system	Project sound from microphones
High-speed Internet connection	1	Show videos during presentation

Table 2: Materials

Materials	Quantity	Purpose	Applicable section
Electronic copy of PowerPoint	1 per facilitator	Run the PowerPoint	All
Laser pointer	1 per facilitator	Facilitate presentation	All
Timer	1 per facilitator	Time activities	All
Sticky notes, pens or pencils, markers	A few per table	Note-taking	All
Name badges	1 per participant	Introduction	All
Name tents	1 per participant	Introduction	All
Copies of slides (three slides per page)	1 per participant	Note-taking	All
Facilitator Resource 1: Customizing Effective Instruction for Adolescent Struggling Readers PD Module: Second Edition	1 per facilitator	Adapt PD Module for different audiences	All
Facilitator Resource 2: Overview of Participant Practice Activities (PPAs)	1 per facilitator	Overview of the nine PPAs	All
Participant Handout 1: Selecting Vocabulary Words to Teach	1 per participant	Use in PPA 2	Vocabulary

Table 2: Materials (continued)

Materials	Quantity	Purpose	Applicable section
Participant Handout 2: <i>What's That Smell?</i>	1 per participant	Use in PPA 3	Reading Comprehension (Asking and Answering Questions)
Participant Handout 3: Supervolcanoes Concept Map	1 per participant	Use in PPA 4	Reading Comprehension (Graphic Organizers)
Participant Handout 4: <i>Learning about Supervolcanoes</i>	1 per participant	Use in PPAs 4, 5, 6	Reading Comprehension (Graphic Organizers & Main Idea and Summarization)
Facilitator Resource 3: Directions for Participant Practice Activity 5	1 per facilitator	Guide PPA 5	Reading Comprehension (Main Idea and Summarization)
Participant Handout 5: <i>Writing Main Ideas</i>	1 per participant	Use in PPA 5	Reading Comprehension (Main Idea and Summarization)
Transparency of Participant Handout 5	1 per facilitator	Use in PPA 5	Reading Comprehension (Main Idea and Summarization)
Facilitator Resource 4: Directions for Participant Practice Activity 6	1 per facilitator	Guide PPA 6	Reading Comprehension (Main Idea and Summarization)
Participant Handout 6: <i>Graphic</i> Organizer for Summarization	1 per participant	Use in PPA 6	Reading Comprehension (Main Idea and Summarization)
Transparency of Participant Handout 6	1 per facilitator	Use in PPA 6	Reading Comprehension (Main Idea and Summarization)
Participant Handout 7: Apoptosis in the Pathogenesis and Treatment of Disease	1 per participant	Use in PPA 7	Motivation & Engagement



Table 2: Materials (continued)

Materials	Quantity	Purpose	Applicable section
Facilitator Resource 5: <i>Example of</i> <i>Completed Chart for PPA 8</i>	1 per facilitator	Use in PPA 8	Motivation & Engagement
Participant Handout 8: <i>Building a</i> <i>Motivating and Engaging</i> <i>Classroom</i>	1 per participant	Use in PPA 8	Motivation & Engagement
Participant Handout 9: <i>Syllable</i> <i>Chunking Intervention</i>	1 per participant	Use in PPA 9	Intensive and Individualized Interventions
Blank index cards	1 per participant	Use in PPA 9	Intensive and Individualized Interventions
Flashcard of portfolio made from an index card	1 per facilitator	Use in PPA 9	Intensive and Individualized Interventions
Participant Handout 10: Professional Development Module References	1 per participant	Reference	All

Facilitators will need to become very familiar with the content of this professional development module. Participant Handout 10 (*Professional Development Module References*) in this *Facilitator's Guide* lists resources the authors consulted in creating the PowerPoint; the meta-analysis and IES practice guide also contain comprehensive references. The resources on the next page will be helpful to new facilitators as well as participants. All are available for download on www.centeroninstruction.org.

Additional assistance

For more information on the preparation and delivery of this professional development, consult the EIASR-PD Training of Trainers PowerPoint presentation available for download at the Center on Instruction website, www.centeroninstruction.org.

FACILITATOR RESOURCES

FACILITATOR RESOURCE 1: Customizing Effective Instruction for Adolescent Struggling Readers Professional Development Module: Second Edition

FACILITATOR RESOURCE 2: *Overview of Participant Practice Activities (PPAs)*

FACILITATOR RESOURCE 3: Directions for PPA 5: Identifying the Main Idea

FACILITATOR RESOURCE 4: Directions for PPA 6: Summarization Instruction

FACILITATOR RESOURCE 5: *Example of Completed Chart for PPA 8: Motivating and Engaging Students*

PARTICIPANT HANDOUTS

PARTICIPANT HANDOUT 1 (PPA 2): Selecting Vocabulary Words to Teach

PARTICIPANT HANDOUT 2 (PPA 3): What's That Smell?

PARTICIPANT HANDOUT 3 (PPA 4): Supervolcanoes Concept Map

PARTICIPANT HANDOUT 4 (PPAs 4, 5, & 6): Learning about Supervolcanoes

PARTICIPANT HANDOUT 5 (PPA 5): Writing Main Ideas

PARTICIPANT HANDOUT 6 (PPA 6): Graphic Organizer for Summarization

PARTICIPANT HANDOUT 7 (PPA 7): Apoptosis in the Pathogenesis and Treatment of Disease

PARTICIPANT HANDOUT 8 (PPA 8): Building a Motivating and Engaging Classroom

PARTICIPANT HANDOUT 9 (PPA 9): Syllable Chunking Intervention

PARTICIPANT HANDOUT 10: Professional Development Module References

FACILITATOR RESOURCE 1

Customizing Effective Instruction for Adolescent Struggling Readers Professional Development Module—Second Edition

The Effective Instruction for Adolescent Struggling Readers: Professional Development Module—Second Edition (EIASR-PD) is intended to improve educational outcomes for adolescent struggling readers by disseminating information on selected research-based strategies appropriate for this population.

The module may be tailored to participants' needs and interests and used with a wide range of professionals, including teachers, administrators, researchers, LEA staff, SEA staff, and other technical assistance providers.

Complementary materials—a meta-analysis (*Interventions for Adolescent Struggling Readers: A Meta-Analysis with Implications for Practice*), a practice brief (*Effective Instruction for Adolescent Struggling Readers: A Practice Brief*), and a practice guide (*Improving Adolescent Literacy: Effective Classroom and Intervention Practices*)—may be useful to PD participants. The first two can be downloaded at http://centeroninstruction.org/resources.cfm?category=specialed&subcategory=&grade_start=&grade_end=#153. The third can be downloaded at ies.ed.gov/ncee/wwc/pdf/practiceguides/adlit_pg_082608.pdf

In general, this professional development module can be customized by altering

- the order of the sections,
- the time spent and emphasis placed on each section,
- the emphasis placed on research findings and study design, and
- the time allocated to modeling strategies and offering instructional examples.

It is important to recognize that teachers will need more support in implementing these practices beyond that provided in this module. Ongoing coaching and follow-up professional development will allow teachers to gain confidence and master the use of effective strategies with diverse groups of students.

Because facilitators will know their audiences best, final decisions on customizing this training are left to their discretion.

Below are suggestions for tailoring the PD to three audiences: state and district staff members and other technical assistance providers, secondary-level reading teachers, and secondary level content-area teachers. Facilitators who wish to use this module to train other facilitators in delivering this PD will find a Training of Trainers (TOT) PowerPoint specific to EIASR-PD on the Center on Instruction website at http://centeroninstruction.org/ resources.cfm?category=specialed&subcategory=&grade_start=&grade_end=#153.

Delivering the PD to state and district staff and other technical assistance providers

Facilitators presenting this module to professionals working at state departments of education and local education agencies typically seek both to ensure participants' *understanding of the*

FACILITATOR RESOURCE 1 *(continued)*

selected research-based instructional practices associated with positive outcomes and to teach participants *how to disseminate* this information to LEAs and schools. Facilitators may find it helpful to:

- Provide participants with copies of the meta-analysis before the training. State and district staff may have a high interest in the research base behind the selected strategies. The meta-analysis is an excellent foundation.
- Spend additional time discussing the findings (e.g., effect sizes) from the meta-analysis and the highlighted research studies in the Intensive and Individualized Reading Intervention and Comprehension sections.
- Spend less time modeling strategies or incorporating instructional examples and more time discussing how the research findings translate broadly into effective instructional strategies. State and district staff members often have less interest in the details of implementing a strategy than in the "big picture" of how research translates to practice. This arrangement may align better with their own goals and interests.

Delivering the PD to upper elementary teachers and specialized teachers

Struggling older students often read several grade levels below average. Specialized teachers, especially reading teachers, may need to provide strategic and intensive reading interventions in one or more components of reading. This situation may also apply to general elementary school teachers in the upper elementary grades. The module highlights instructional strategies that meet the various needs of struggling readers. Facilitators may find it helpful to do the following:

- Present the sections of the module that teachers currently need or express the most interest in. (For instance, specialized teachers may be most interested in learning the information in the Intensive and Individualized Reading Interventions section.) Alternatively, if teachers want to learn about effective strategies in all the reading components covered in this module, facilitators are encouraged to proceed through the entire module in order, since each reading component is framed as a necessary "building block" for subsequent components.
- *Discuss research findings broadly.* For example, define "effect size" concisely for those unfamiliar with the term and focus more on the implications of the research findings for practice. It may be unnecessary to discuss the research study design for the two highlighted studies (located in Intensive and Individualized Reading Interventions and Reading Comprehension) in as much detail as the module offers.
- Focus on the delivery of the recommended effective practices. This may mean modeling strategies or building in more instructional examples so that teachers feel comfortable implementing these practices in their classrooms.

FACILITATOR RESOURCE 1 *(continued)*

• *Give copies of the practice brief* to teachers as a reference as they begin to implement new strategies. Teachers need not read the meta-analysis before or after the training, although they are welcome to do so.

Delivering the PD module to secondary content-area teachers

Content-area teachers at the secondary level are responsible for conveying discipline-specific concepts to students who may be challenged by reading increasingly complex, unfamiliar texts and learning a wide range of new vocabulary specific to each content-area. Many recommended strategies in the module are appropriate for content classrooms. They can be incorporated into instruction, making content texts more accessible. Facilitators may find it helpful to the following.

- Concentrate on information included in the Vocabulary, Reading Comprehension, and Motivation and Engagement sections. (The Intensive and Individualized Reading Interventions section may not apply to most content-area classrooms.)
- *Discuss the research findings broadly.* For example, define "effect size" concisely for those unfamiliar with the term and focus more on the implications of the research findings for practice. It may be unnecessary to discuss the research study design for highlighted research studies in as much detail as the module offers.
- Focus on the delivery of the recommended effective practices. This may mean modeling strategies or building in more instructional examples so that teachers feel comfortable implementing these practices. Alternatively, a facilitator could ask teachers to bring in more of their own content-area texts for practice during the Vocabulary and Reading Comprehension sections.
- *Give copies of the practice brief to teachers* as a reference as they begin to implement new strategies. It is not necessary that teachers read the meta-analysis before or after the training, although they certainly may if they wish.

Furthering the work

Staff members of Regional Comprehensive Centers (RCCs) and State Education Agencies (SEAs) may wish to advance the understanding of effective reading instruction for struggling adolescents with other audiences and build state and local capacity through further work with this module. They might consider these activities.

- *Conduct discussions of capacity building,* such as brainstorming ways to develop or improve reading initiatives in secondary literacy and finding ways to disseminate the module to other audiences.
- Assist state and district staffers in identifying appropriate facilitators who can expand the training by preparing participants to deliver the PD to other audiences.

FACILITATOR RESOURCE 1 *(continued)*

 Offer this PD in a "Training of Trainers" (TOT) model once participants feel secure in their understanding of the module's content. RCC and SEA staff may wish to provide their own TOT session using the Training of Trainers component of the Effective Instruction for Adolescent Struggling Readers: Professional Development Module—Second Edition developed by Center on Instruction. It is available on the Center on Instruction website at http://centeroninstruction.org/resources.cfm?category=specialed&subcategor y=&grade_start=&grade_end=#153.

FACILITATOR RESOURCE 2 Overview of Participant Practice Activities (PPAs)

VOCABULARY

PPA	SLIDES	MATERIALS	DESCRIPTION
#1 Selecting Vocabulary Words to Teach	36, 37, & 38 (Classroom Scenarios A, B, and C)	Timer and slides with speaker notes [Note: there is no Participant Handout for PPA 1]	Participants read a classroom scenario and discuss how the teacher should select words for vocabulary instruction.
#2 Self- Selecting Vocabulary Words to Teach	39	Participant Handout 1 (<i>Selecting Vocabulary</i> <i>Words to Teach</i>), participants' own textbooks or novels, timer, and slide with speaker notes	Participants use their own content-area text to select appropriate vocabulary words and instructional strategies and engage in whole-group discussion.

FACILITATOR RESOURCE 2 (continued)

READING COMPREHENSION

PPA	SLIDES	MATERIALS	DESCRIPTION
#3 Generating Questions	60	Participant Handout 2 (<i>What's That Smell?</i>) and slide with speaker notes	Participants read an expository passage, generate their own questions using Participant Handout 2, and engage in whole-group discussion.
#4 Using a Graphic Organizer	67 & 68	Participant Handouts 3 (Supervolcanoes Concept Map) and 4 (Learning about Supervolcanoes), timer, and slides with speaker notes	Participants will add facts to the graphic organizer based on what they read in an expository passage and engage in whole- group discussion.
#5 Identifying the Main Idea	74	Facilitator Resource 3 (Directions for PPA 5), Participant Handouts 4 (<i>Learning about</i> <i>Supervolcanoes</i>) and 5 (<i>Writing Main Ideas</i>), transparency of Participant Handout 5, timer, and slide with speaker notes	Participants watch facilitator model instruction on identifying the main idea, write several main ideas themselves, and engage in whole-group discussion.
#6 Summarization Instruction	79 & 80	Facilitator Resource 4 (Directions for PPA 6), Participant Handouts 4 (<i>Learning about</i> <i>Supervolcanoes</i>) and 6 (<i>Graphic Organizer for</i> <i>Summarization</i>), transparency of Participant Handout 6, and slides with speaker notes	Participants write a summary with guided instruction from the facilitator and engage in whole- group discussion.

FACILITATOR RESOURCE 2 (continued)

MOTIVATION AND ENGAGEMENT

PPA	SLIDES	MATERIALS	DESCRIPTION
#7 Generating Level 2 Questions	98	Participant Handout 7 (Apoptosis in the Pathogenesis and Treatment of Disease), timer, and slide with speaker notes	Participants are chosen (by facilitator) to work with a partner or individually to complete a reading task and then engage in whole-group discussion.
#8 Motivating and Engaging Students	105	Facilitator Resource 5 (Example of Completed Chart for PPA 8), Participant Handout 8 (<i>Building a Motivating and</i> <i>Engaging Classroom</i>), timer, and slide with speaker notes	Participants develop a plan for delivering motivating and engaging instruction in their own classrooms.

INTENSIVE AND INDIVIDUALIZED READING INTERVENTIONS (WITH WORD STUDY)

PPA	SLIDES	MATERIALS	DESCRIPTION
#9 Syllable Chunking	140, 141, & 142	Participant Handout 9 (<i>Syllable Chunking</i> <i>Intervention</i>), flash card of the word <i>portfolio</i> , blank index cards, timer, and slides with speaker notes	Participants observe the facilitator modeling the syllable chunking strategy, practice the strategy with a partner, and engage in whole-group discussion.

FACILITATOR RESOURCE 3 Directions for PPA 5 Identifying the Main Idea

Materials for activity

- Slide 74
- Participant Handout 4: Learning about Supervolcances (one per participant)
- Participant Handout 5: Writing Main Ideas (one per participant)
- Transparency of Participant Handout 5—one per facilitator
- Timer

Facilitator script

One of the best ways to teach students to find the main idea is by modeling. When modeling the strategy to find the main idea, "think aloud" as you decide what information to include in your main idea and what information you don't want to include and why. This will help scaffold students' thinking about writing main ideas. After you've modeled it several times, let students practice the strategy in small groups and, finally, independently. These steps are consistent with the "I do, we do, you do" strategy.

<<Ask participants to take out their copies of Participant Handouts 4 and 5. Place your transparency of Participant Handout 5 on the overhead projector and write in answers as you work through the activity.>>

Let's read paragraph one of this passage together. <<*Read paragraph aloud.>>* This paragraph is only two sentences long and really serves as an introduction to the article. It's not necessary to find the main idea of this paragraph, but we may use it later when we write our "big idea" sentence in our summary in Participant Practice Activity 6.

Let's read paragraph two of this passage together. <<*Read paragraph aloud.>>* Who or what was this paragraph about? <<*Answer: Magnetotellurics>>*

And what was the most important information about magnetotellurics in that paragraph? <<*Answer: It's a technique used to detect magma underground.>>*

Let's use our fingers to count out a sentence that is approximately 10 words or less. Then we can write that sentence down. *<<Answer: Magnetotellurics is a technique used to detect magma underground.>>*

Now it's your turn to practice finding the main idea. Take a minute to read paragraph 3, and then tell me what is the important "who" or "what" of the third paragraph? <<*Answer: Measurements from magnetotelluric sensors.>>*

What is the important information about the measurements from the magnetotelluric sensors? << They revealed a column that connects to a large zone of conductive material.>>

Now try to write your main idea for paragraph 3 in ten words or less. Then we will share answers and discuss. <<*Possible paragraph 3 main idea: Magnetotelluric measurements revealed a column connecting to a zone of conductive material.*>>

FACILITATOR RESOURCE 3 (continued)

You now have 3 minutes to find the main idea for paragraph 4. Then we will check answers.

<<Possible paragraph 4 main idea: This zone was identified in the 1980s but was mistaken for wet sediment.>>

Whole-group discussion questions

What were some things that caused confusion when identifying the main idea of each paragraph? << Possible answers: Very complex sentences made it difficult to figure out what the main subject of the paragraph was; a lot of information packed into each paragraph; difficult vocabulary and terminology>>

What are some ways we can help our students overcome these same obstacles? <<*Possible* answers: Start out with less complex text and build up to more complex; provide lots of modeling and think alouds>>

Other questions or things to discuss?

FACILITATOR RESOURCE 4 Directions for PPA 6 Summarization Instruction

Materials for activity

- Slides 79 and 80
- Participant Handout 4: Learning about Supervolcances (one per participant)
- Participant Handout 6: Graphic Organizer for Summarization (one per participant)
- Transparency of Participant Handout 6 (one per facilitator)

Facilitator script

We have already found the main ideas in paragraphs 2 through 5.

<<Show transparency of Participant Handout 6.>>

Now we will use these four sentences, plus our big idea sentence, to write a brief summary paragraph. You can write the paragraph with me on your own copy of Participant Handout 6 in the summary box.

As you watch the lesson and write your own summary, please make a mental note of all the skills a student will need to write his or her own summary. At the end we will engage in whole-group discussion about this task.

<<Show slide 80 so you can refer to the four summarization steps.>>

Step 1: Write a topic sentence using the big idea statement. I will start by using the sentence that is already written on the graphic organizer. If I need to edit it later, I will. (This big idea sentence came from paragraph one of the passage.)

<<Write big idea topic sentence on transparency of Participant Handout 6 in the summary box.>>

Step 2: Include main ideas in an order that makes sense. We can put the main idea sentences in order by the paragraph numbers and they will make sense. As I write these sentences in my summary, I may change a few words, so the sentences have smooth transitions between them.

<<Write the sentences below while thinking aloud.>>

Magnetotellurics is a technique used to detect magma underground. Magnetotelluric measurements revealed a column connecting to a zone of conductive material. This zone was identified in the 1980s but was mistaken for wet sediment. New measurements indicate conductive material is a semi-molten mixture.

Step 3: Delete information that is redundant or trivial. As I reread this paragraph, I notice that I say the word "*magnetotellurics*" a lot at the beginning of each sentence. I think I will combine sentences 1 and 2 into a compound sentence so the paragraph is less choppy.

Step 4: Reread for understanding and edit if necessary.

<<Read paragraph once more. Perform other editing so that the sentences have meaning and flow together.>>

A supervolcano may be brewing beneath Mount St. Helens. Magnetotellurics, a technique used to detect magma underground, revealed a column beneath Mount St. Helens connected to a zone of conductive material. This zone was first identified in the 1980s but was mistaken for wet sediment. New measurements indicate the conductive material is a semi-molten mixture."

So far, we've only identified the main idea of the first five paragraphs, but if you were going to write a summary of the entire passage you would continue identifying the main idea of each paragraph and adding these statements to the summary.

Whole-group discussion question

<<Go back to Slide 79 to show discussion questions.>>

What skills do students need to possess to be able to write their own summaries? <</ r>
 <Possible answers: Decoding, reading comprehension, ability to identify main idea, ability to synthesize ideas, grammar, punctuation, writing skills, ability to edit.>> Summarization is a higher-level comprehension skill, so expect to do a lot of whole-class practice before students are able to do this in small groups. Again, the process of "I do, we do, you do" is a very effective way to scaffold instruction and support students as they work to understand and practice this new strategy.

FACILITATOR RESOURCE 5 Example of Completed Chart for PPA 8 Motivating and Engaging Students

Materials for activity

- Slide 105
- Participant Handout 8: Building a Motivating and Engaging Classroom (one per participant)

Below is an example of a completed chart indicating how a biology unit on climate change could be made especially motivating and engaging for students.

Establish content learning goals	Create a positive learning environment
• Before unit begins, have students write down what they want to learn during the climate change unit and how/where they think they can learn about it. (This information could be kept in a learning log/journal.)	 Allow students to find news articles relevant to the particular area they are interested in learning about. Be supportive of student mistakes.
Create relevant literacy experiences	Build in effective instructional conditions
• Find interesting articles for students to supplement the material in their textbook.	• Allow interested students to form study groups based on interest in similar topics related to climate change.
	• Develop a lab that illustrates the greenhouse effect.
	Plan a field trip or guest speaker.

PARTICIPANT HANDOUT 1 (PPA 2) Selecting Vocabulary Words to Teach

Objective: This activity is designed to provide you with guided practice in (a) selecting a small set of vocabulary words that are most important for your students to learn in your specific content-area and (b) identifying strategies to effectively teach those words.

Activity Steps

- 1. Pull out the unit in a text book or chapter that you plan to use in your classroom.
- 2. Choose which instructional method is most appropriate for selecting new vocabulary words from the text for your unit or lesson. (See slides 31–34 for assistance.)
- 3. Using the method identified in step 1 above, select *five* words you will directly and explicitly teach to your students and record them in the chart on the next page (in the Direct Instruction column on the left).
- 4. Record definitions/non-definitions and examples/non-examples that you can use to illustrate the meaning of these words to your students. (See slides 26–28 for assistance.)
- 5. Help your students become independent vocabulary learners by conducting "mini lessons" when you or your students encounter unfamiliar words while reading text aloud in a whole group format. Identify THREE words within your text that you did not select in step 2, but that students may not know the meaning of. Record those words in the chart below (in the Independent Vocabulary Acquisition section on the right) along with the strategy you'll implement to help students decipher the meaning of those words. (See slides 29 and 30 for assistance.)
- 6. It is important that students have time to practice new words and receive multiple exposures to words. Address the two questions listed at the bottom of slide 39. (Please note that these questions apply only to the words identified for *direct instruction*.)
- 7. Congratulations, you've now selected key vocabulary words to teach!
- Selecting appropriate words is only the first step in designing a vocabulary lesson plan. For a more complete plan, see the tool entitled, "Lesson Planning: Preparing Content-Area Activities" from the Doing What Works website. Go to: http://dww.ed.gov/do/?T_ID=23&P_ID=59&t=2#tc

(NOTE: The words and strategies you identified in this activity can be transferred and inserted into the lesson plan framework available on the Doing What Works website.) *(continued)*

PARTICIPANT HANDOUT 1 (continued)

Name/Topic of unit:

Textbook/Novel chapter:

DIRECT INSTRUCTION OF SPECIFIC WORDS			INDEPENDENT VOCABULARY ACQUISITION		
Word	Definition/Non- definition	Example/Non- example	Word	Location in text (Pg. #)	Strategy to practice
Ex., Protagonist	The principal character in a story; the lead.	<i>Dorothy Gale is the protagonist in</i> The Wizard of Oz.	Ex., Involuntary	Pg. 52, second paragraph	Word parts
	The antagonist is the enemy of the protagonist.	<i>The Wicked Witch is the antagonist in</i> The Wizard of Oz.			

PARTICIPANT HANDOUT 2 (PPA 3) What's That Smell?

What's That Smell?

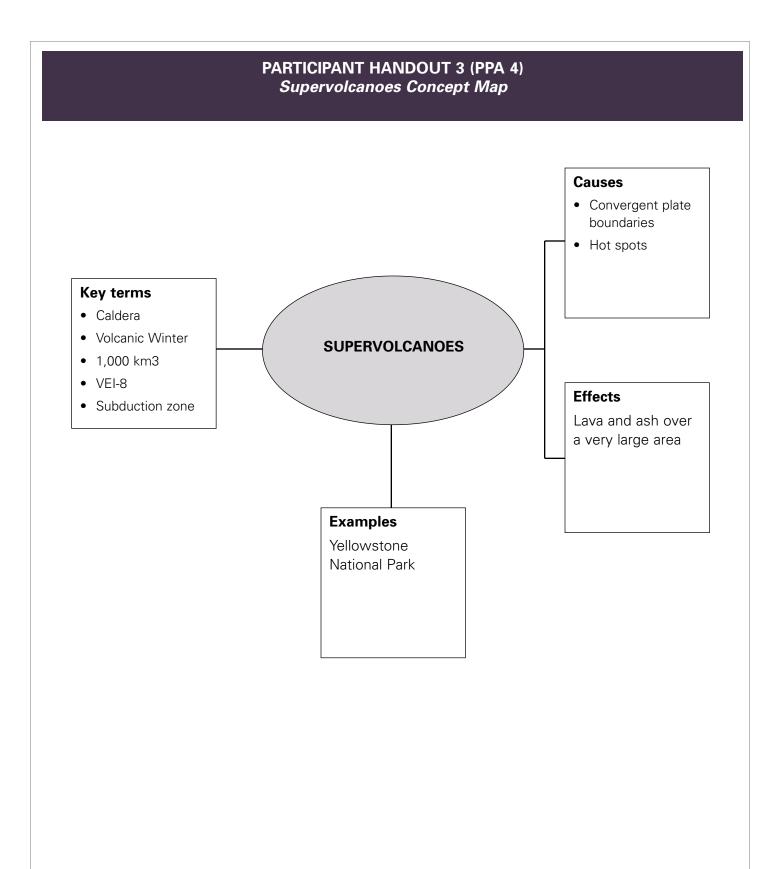
Have you ever remembered something with your nose? Maybe the smell of hot dogs gets you daydreaming about being at a baseball game. Or the smell of burnt marshmallows reminds you of a night around a campfire. Scientists know that the sense of smell can trigger powerful memories. Wouldn't it be cool to somehow bottle those memories? That's exactly what perfumer Mark Crames tries to do. His company, Demeter Fragrance, makes more than 200 scents.

"Imagine every smell in the world as a musical note," Crames told TFK. "We try to combine those notes to make a melody." He has created perfumes inspired by Play-Doh, thunderstorms, and even earthworms!

DIRECTIONS: Generate your own questions based on the prompts given below. Answer each question in a complete sentence and circle the question type/level. (The first and last questions have already been generated for you!)

1) How many perfume scents does Demeter Fragrance make?

Right There	Think and Search	On my Own				
2) 14/by do you think		?				
2) Why do you think	?					
Right There	Think and Search	On my Own				
3) How is the perfume compar	?					
Right There	Think and Search	On my Own				
4) How might making perfume be similar to writing a song?						
Right There	Think and Search	On my Own				
(From: Time For Kids: World Report. May 2, 2008. Volume 13, Issue 26.)						



PARTICIPANT HANDOUT 4 (PPAs 4, 5, & 6) Learning About Supervolcanoes

Supervolcano may be brewing beneath Mount St. Helens

Is a supervolcano brewing beneath Mount St. Helens? Peering under the volcano has revealed what may be an extraordinarily large zone of semi-molten rock, which would be capable of feeding a giant eruption.



Mount St. Helens may be connected to a semi-molten magma chamber that could fuel a giant eruption.

Magma can be detected with a technique called magnetotellurics, which builds up a picture of what lies underground by measuring fluctuations in electric and magnetic fields at the surface. The fields fluctuate in response to electric currents traveling below the surface, induced by lightning storms and other phenomena. The currents are stronger when magma is present, since it is a better conductor than solid rock.

Graham Hill of GNS Science, an earth and nuclear science institute in Wellington, New Zealand, led a team that set up magnetotelluric sensors around Mount St. Helens in Washington state, which erupted with force in 1980. The measurements revealed a

column of conductive material that extends downward from the volcano. About 15 kilometres below the surface, the relatively narrow column appears to connect to a much bigger zone of conductive material. The column below Mount St. Helens appears to connect to a huge zone of conductive material.

This larger zone was first identified in the 1980s by another magnetotelluric survey, and was found to extend all the way to beneath Mount Rainier 70 kilometres to the north-east, and Mount Adams 50 kilometres to the east. It was thought to be a zone of wet sediment, water being a good electrical conductor.

However, since the new measurements show an apparent conduit connecting this conductive zone to Mount St. Helens—which was undergoing a minor eruption of semi-molten material at the time the measurements were made—Hill and his colleagues now think the conductive material is more likely to be a semi-molten mixture. Its conductivity is not high enough for it to be pure magma, Hill says, so it is more likely to be a mixture of solid and molten rock.

Gary Egbert of Oregon State University in Corvallis, who is a magnetotellurics specialist but not a member of Hill's team, is cautious about the idea of a nascent supervolcano where Mount St. Helens sits. "It seems likely that there's some partial melt down there," given that it is a volcanic area, he says. "But part of the conductivity is probably just water."

(continued)

From www.newscientist.com, 10 June 2009 by David Shiga

PARTICIPANT HANDOUT 4 *(continued)*

If the structure beneath the three volcanoes is indeed a vast bubble of partially molten rock, it would be comparable in size to the biggest magma chambers ever discovered, such as the one below Yellowstone National Park.

Every few hundred thousand years, such chambers can erupt as so-called supervolcanoes the Yellowstone one did so about 640,000 years ago. These enormous eruptions can spew enough sunlight-blocking ash into the atmosphere to cool the climate by several degrees Celsius.

Could Mount St. Helens erupt like this? "A really big, big eruption is possible if it is one of those big systems like Yellowstone," Hill says. "I don't think it will be tomorrow, but I couldn't try to predict when it would happen."

Further measurements probing the structure of the crust beneath the other volcanoes in the area could help determine if the zone connects to them all, Hill says. He presented his team's results on 27 May at the Joint Assembly geophysics meeting in Toronto, Canada.

PARTICIPANT HANDOUT 5 (PPA 5) Writing Main Ideas

There are three parts to finding the main idea:

- 1. Pick out the most important who or what
- 2. Tell what the most important thing is about that who or what
- 3. Try to write all of this in ten words or less

Passage paragraph 2

- 1. The most important who or what is _____
- 2. What does this paragraph tell me about the who or what?

3. MAIN IDEA: Put #1 and #2 together in 10 WORDS OR LESS:

Passage paragraph 3

- 1. The most important who or what is _____
- 2. What does this paragraph tell me about the who or what?
- 3. MAIN IDEA: Put #1 and #2 together in 10 WORDS OR LESS:

Passage paragraph 4

- 1. The most important who or what is _____
- 2. What does this paragraph tell me about the who or what?
- 3. MAIN IDEA: Put #1 and #2 together in 10 WORDS OR LESS:

PARTICIPANT HANDOUT 5 (continued)

Passage paragraph 5

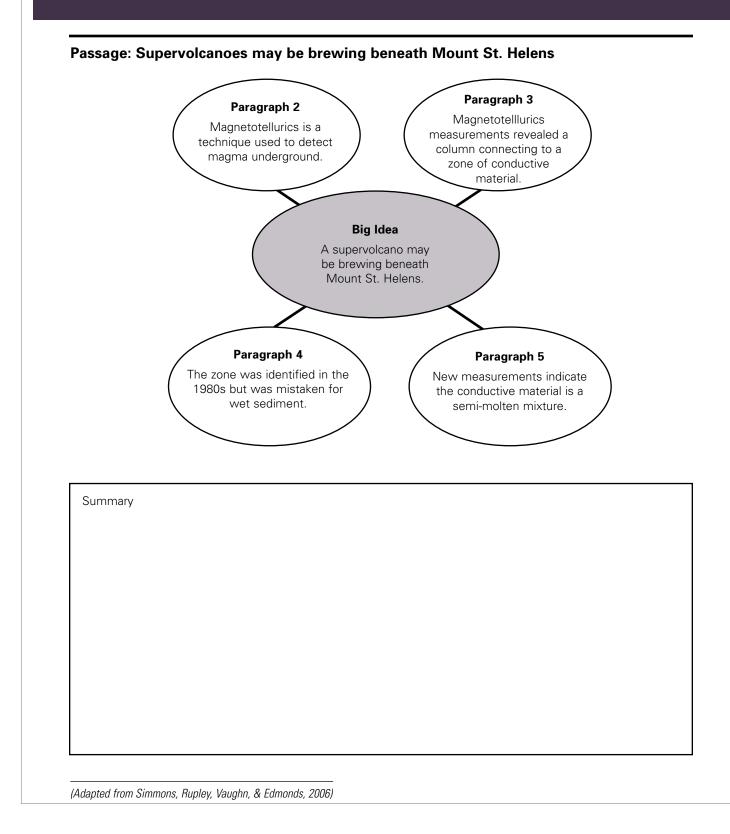
1. The most important who or what is _____

2. What does this paragraph tell me about the who or what?

3. **MAIN IDEA:** Put #1 and #2 together in 10 WORDS OR LESS:

(Adapted from Vaughn Gross Center for Reading and Language Arts at The University of Texas at Austin, 2006, and from Klingner et al., 2001.)

PARTICIPANT HANDOUT 6 (PPA 6) Graphic Organizer for Summarization



PARTICIPANT HANDOUT 7 (PPA 7) Apoptosis in the Pathogenesis and Treatment of Disease

Apoptosis in the Pathogenesis and Treatment of Disease

In multicellular organisms, homeostasis is maintained through a balance between cell proliferation and cell death. Although much is known about the control of cell proliferation, less is known about the control of cell death. Physiologic cell death occurs primarily through an evolutionarily conserved form of cell suicide termed apoptosis. The decision of a cell to undergo apoptosis can be influenced by a wide variety of regulatory stimuli. Recent evidence suggests that alterations in cell survival contribute to the pathogenesis of a number of human diseases, including cancer, viral infections, autoimmune diseases, neurodegenerative disorders, and AIDS (acquired immunodeficiency syndrome). Treatments designed to specifically alter the apoptotic threshold may have the potential to change the natural progression of some of these diseases.

Directions: Generate a level 2 (Think and Search) question about this passage:

Thompson, C.B. (1995). Apoptosis in the pathogenesis and treatment of disease. Science, 5203(267), 1456-1462.

PARTICIPANT HANDOUT 8 (PPA 8) Building a Motivating and Engaging Classroom

Part I. You are a 9th-grade biology teacher. You are about to start a unit on climate change. You think this could be an area of high interest to your students due to all the attention that global warming has been receiving in the media. How can you the make the material in this new unit especially motivating and engaging to your students?

In each quadrant, list ways to fulfill each of the instructional recommendations we just discussed. Feel free to use slides 99–104 to help you. You may also discuss this with a partner or small group.

Establish content learning goals	Create a positive learning environment
Create relevant literacy experiences	Build in effective instructional conditions

Part II. Now think about the content-area that you teach and the unit you are currently teaching or one that you will be teaching soon. What kinds of things can you do to make instruction motivating and engaging to your students? Once you are ready, share your ideas with a partner.

Establish content learning goals	Create a positive learning environment
Create relevant literacy experiences	Build in effective instructional conditions

PARTICIPANT HANDOUT 9 (PPA 9) Syllable Chunking Intervention

Students read the word aloud. If incorrect, tell them the word and have them repeat it.

Students explain the word's meaning.

If incorrect, provide corrective feedback.

Students orally divide the word's pronunciation into its syllables or beats by raising a finger as each beat is pronounced and then stating the number of beats.

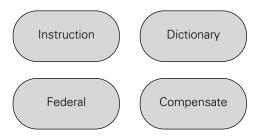
If incorrect, model the correct response (e.g., fin-ish= two beats).

Students match the pronounced form of each beat to its spelling by exposing with their thumbs that part of the spelling as it was pronounced, while covering the other letters. (Different ways of dividing words into syllables are accepted.)

If incorrect, model and explain the correct segmentation and have students copy the response.

Students blend the syllables to say the whole word. If incorrect, say the word and repeat it.

With a partner, practice using the syllable chunking strategy with one of the words below.



PARTICIPANT HANDOUT 10 Professional Development Module References

- Anderman, L. H. (1999). Classroom goal orientation, school belonging and social goals as predictors of students' positive and negative affect, following the transition to middle school. *Journal of Research and Development in Education, 32,* 89–103.
- Archer, A. L., Gleason, M. M., & Vachon, V. L. (2003). Decoding and fluency: Foundation skills for struggling older readers. *Learning Disability Quarterly, 26,* 89–101.
- Ausubel, D. P. (1968). The psychology of meaningful learning. New York: Grune & Stratton.
- Barron, R. F., & Melnik, R. (1973). The effect of spaced repetition on meaningful retention. *Journal* of General Psychology, 73, 147–50.
- 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), 150–76.
- Baumann, J. F., & Kame'enui, E. J. (1991). Research on vocabulary instruction: Ode to Voltaire. In J. Flood, D. Lapp, & J.R. Squire (Eds.), *Handbook of research on teaching the English Language Arts* (pp. 604–632). New York: MacMillan.
- Baumann, J. F., Kame'enui, E. J., & Ash, G. (2003). Research on vocabulary instruction: Voltaire redux. In J. Flood, D. Lapp, J. R. Squire, & J. Jensen (Eds.), *Handbook of research on teaching the English Language Arts (2nd ed.)*(pp. 752–785). Mahwah, NJ: Lawrence Erlbaum.
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction.* New York, NY: Guilford.
- Beck, I. L., McKeown, M. G., Omanson, R. C., & Pople, M. T. (1985). Some effects of the nature and frequency of vocabulary instruction on the knowledge and use of words. *Reading Research Quarterly*, 20, 522–535.
- Beck, I. L., Perfetti, C. A., & McKeown, M. G. (1982). Effects of long-term vocabulary instruction on lexical access and reading comprehension. *Journal* of Educational Psychology, 74(4), 506–21.
- Bhattacharya, A., & Ehri, L. C. (2004). Graphosyllabic analysis helps adolescent struggling readers read and spell words. *Journal of Learning Disabilities, 37*(4), 331–348.
- Biemiller, A. (2005). Size and sequence in vocabulary development: Implications for choosing words for primary grade vocabulary instruction. In E. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 223–42). Mahwah, NJ: Erlbaum.
- Blachowicz, C., & Ogle, D. (2001). *Reading comprehension: Strategies for independent learners*. New York: Guilford.

PARTICIPANT HANDOUT 10 (continued)

- Boardman, A. G., Roberts, G., Vaughn, S., Wexler, J. Murray, C. S., & Kosanovich, M. (2008). *Effective instruction for adolescent struggling readers: A practice brief.* Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Bos, C. S., & Anders, P. L. (1990). Effects of interactive vocabulary instruction on the vocabulary learning and reading comprehension of junior-high learning disabled students. *Learning Disability Quarterly*, *13*, 31–42.
- Bos, C., & Filip, D. (1984). Comprehension monitoring in learning disabled and average students. *Journal of Learning Disabilities, 17*(4), 229–233.
- Bos, C. S., & Vaughn, S. (2002). *Strategies for teaching students with learning and behavior problems* (5th ed.). Boston, MA: Allyn & Bacon.
- Daane, M. C., Campbell, J. R., Grigg, W. S., Goodman, M. J., & Oranje, A. (2005). Fourth-grade students reading aloud: NAEP 2002 special study of oral reading (NCES 2006-469). U.S.
 Department of Education. Institute of Education Sciences, National Center for Education Statistics. Washington, DC: Government Printing Office.
- Dale, E. (1965). Vocabulary measurement: Techniques and major findings. *Elementary English, 42,* 895–901, 948.
- Denton, C., Bryan, D., Wexler, J., Vaughn, S., & Reed, D. (2007). *Effective instruction for middle school students with reading difficulties: The reading teacher's sourcebook.* Austin, TX: Vaughn Gross Center for Reading and Language Arts at The University of Texas at Austin.
- DiCecco, V., & Gleason, M. (2002). Using graphic organizers to attain relational knowledge from expository text. *Journal of Learning Disabilities, 35*(4), 306–320.
- Doing What Works [DWW]. (2010). www.dww.ed.gov
- Duffy, G. C., et al. (1987). Effects of explaining the reasoning associated with using reading strategies. *Reading Research Quarterly, 22*(3), 347–68.
- Edmonds, M. S., Vaughn, S., Wexler, J., Reutebuch, C. K., Cable, A., Tackett K. K., & Schnakenberg, J. W. (2009). A synthesis of reading interventions and effects on reading comprehension outcomes for older struggling readers. *Review of Educational Research*, *79*, 262–300.
- Fitzgerald, F. S. (1925). The great gatsby. New York: Charles Scribner's Sons.
- Flowerday, T., & Schraw, G. (2000). Teacher beliefs about instructional choice: A phenomenological study. *Journal of Educational Psychology*, *92*(4), 634–645.

PARTICIPANT HANDOUT 10 (continued)

- Foorman, B. R., Francis, D. J., Fletcher, J. M., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37–55.
- Foorman, B., & Torgesen, J. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research & Practice, 16*, 203–212.
- Fuchs, D., Fuchs, L. S., Mathes, P. H., & Simmons, D. C. (1997). Peer-assisted strategies: Making classrooms more responsive to diversity. *American Educational Research Journal, 34*(1), 174–206.
- Gajria, G., & Salvia, M. (1992). The effects of summarization on text comprehension of students with learning disabilities. *Exceptional Children, 58,* 508–516.
- Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of the research. *Review of Educational Research*, 71(2), 279–320.
- Geva, E., & Siegel, L. S. (2000). Orthographic and cognitive factors in the concurrent development of basic reading skills in two languages. *Reading and Writing: An Interdisciplinary Journal, 12*(1–2), 1–30.
- Gottfried, A. W. (1985). Measures of socio-economic status in child development research: Data and recommendations. *Merrill-Palmer Quarterly, 31*(1), 85–92.
- Guthrie, J. T., & Davis, M. H. (2003). Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading and Writing Quarterly, 19,* 59–85.
- Guthrie, J. T., & Humenick, N. M. (2004). Motivating students to read: Evidence for classroom practices that increase reading motivation and achievement. In P. McCardle & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 329–354).
- Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In
 M. Kamil, R. Barr, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. III, pp. 403–425). New York, NY: Longman.
- Hansen, J. & Pearson, D. P. (1983). An instructional study: Improving the inferential comprehension of good and poor fourth-grade readers. *Journal of Educational Psychology*, *75* (6), 821–829.
- Harter, S., Whitesell, N., & Kowalski, P. (1992). Individual differences in the effects of educational transitions on young adolescents' perceptions of competence and motivational orientation. *American Educational Research Journal, 29*(4), 777–807.

PARTICIPANT HANDOUT 10 (continued)

- Hiebert, E. H. (2005). In pursuit of an effective, efficient vocabulary curriculum for elementary students. In E. H. Hiebert & M. L. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 243–63). Mahwah, NJ: Erlbaum.
- Hirsch, E. D., Jr. (2003). Reading comprehension requires knowledge—of words and the world: Scientific insights into the fourth-grade slump and the nation's stagnant comprehension scores. *The American Educator, 27*(1), 10–13, 16–22, 28–29.
- lvey, G. (1999). Reflections on teaching struggling middle school readers. *Journal of Adolescent* and Adult Literacy, 42, 372–381.
- Jenkins, J. R., Matlock, B., & Slocum, T. A. (1989). Two approaches to vocabulary instruction: The teaching of individual word meanings and practice in deriving word meaning from context. *Reading Research Quarterly, 24*(2), 215–35.
- Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices:*A practice guide (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Katims, D., & Harris, S. (1997). Improving the reading comprehension of middle school students in inclusive classrooms. *Journal of Adolescent & Adult Literacy, 41*(2), 116–23.
- Klingner, J. K., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a second language. *The Elementary School Journal*, *96*, 275–293.
- Klingner, J. K., Vaughn, S., Dimino, J., Schumm, J. S., & Bryant, D. (2001). *From clunk to click: Collaborative strategic reading.* Longmont, CO: Sopris West.
- Klingner, J. K., Vaughn, S., & Schumm, J. (1998). Collaborative strategic reading during social studies in heterogeneous fourth grade classrooms. *Journal of Learning Disabilities*, 31, 148–158.
- Lee, J., Grigg, W., & Donahue, P. (2007). *The Nation's report card: Reading 2007* (NCES 2007-496).
 Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Morgan, P. L., & Fuchs, D. (2007). Is there a bidirectional relationship between children's reading skills and reading motivation? *Exceptional Children*, *73*(2), 165–183.

PARTICIPANT HANDOUT 10 (continued)

- Nagy, W., Berninger, V. W., & Abbott, R. D. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle school students. *Journal of Educational Psychology*, *98*(1), 134–147.
- National Institute of Child Health and Human Development [NICHD]. (2000). Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- National Institute for Literacy [NIFL]. (2007). *What content-area teachers should know about literacy.* Washington, DC: Author.
- Nichols, J. D., & Miller, R. B. (1994). Cooperative learning and student motivation. *Contemporary Educational Psychology*, *19*, 167–178.
- Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching* (3rd ed.). New York: Guilford.
- Pressley, M., & Levin, J. R. (1987b). Elaborative learning strategies for the inefficient learner. In S. J. Ceci (Ed.), *Handbook of cognitive, social, and neuropsychological aspects of learning disabilities* (Vol. 2, pp. 175–212). Hillsdale, NJ: Erlbaum.
- Pressley, M., Snyder, B. L., & Cariglia-Bull, T. (1987a). How can good strategy use be taught to children? Evaluation of six alternative approaches. In S. M. Cormier & J. D. Hagman (Eds.), *Transfer of learning: Contemporary research and applications.* New York: Academic Press.
- Raphael, T. E. (1986). Teaching question-answer relationships, revisited. *The Reading Teacher, 29,* 516–522.
- Raphael, T. E., & McKinney, J. (1983). An examination of fifth- and eighth-grade children's questionanswering behavior: An instructional study in metacognition. *Journal of Reading Behavior*, 15(3), 67–86.
- Raphael, T. E., Winograd, P., & Pearson, P. D. (1980). Strategies children use when answering questions. In M. L. Kamil & A. J. Moe (Eds.), *Perspectives on reading research and instruction*. Washington, DC: National Reading Conference.
- Scammacca, N., Roberts, G., Vaughn, S., Edmonds, M., Wexler, J., Reutebuch, C. K., & Torgesen,
 J. K. (2007). *Reading interventions for adolescent struggling readers: A meta-analysis with implications for practice.* Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Schumaker, J. B., & Deshler, D. D. (1992). Validation of learning strategy interventions for students with LD: Results of a programmatic research effort. In B. Y. L. Wong (Ed.), *Intervention research with students with learning disabilities* (pp. 22–46). New York: Springer-Verlag.

PARTICIPANT HANDOUT 10 (continued)

- Shiga, D. (2009). Supervolcano may be brewing beneath Mount St. Helens. Downloaded from www.newscientist.com on June 10, 2009.
- Simmons, D. C., Griffin, C. C., & Kame'enui, E. J. (1988). Effects of teacher-constructed pre- and post-graphic organizer instruction on sixth-grade science students' comprehension and recall. *Journal of Educational Research*, *82*(1), 15–21.
- Simmons, D. C., Rupley, W. H., Vaughn, S., & Edmonds, M. (2006). Teacher quality research project. (#R305M050121A). Washington, DC: U.S. Department of Education, Institute of Educational Sciences.
- Smith, P. L., & Friend, M. (1986). Training LD adolescents in strategy for using text structure to aid recall of instructional prose. *Learning Disabilities Research, 2*, 38–44.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21,* 360–407.
- Swanborn, M. S. L., & de Glopper, K. (1999). Incidental word learning while reading: A metaanalysis. *Review of Educational Research, 69,* 261–285.
- Thompson, C.B. (1995). Apoptosis in the pathogenesis and treatment of disease. *Science*, *5203*(267), 1456–1462.
- Torgesen, J. K., et al. (2007). Academic literacy instruction for adolescents: A guidance document from the Center on Instruction. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Vaughn Gross Center for Reading and Language Arts at The University of Texas at Austin (2006). *Effective instructional practices: Comprehension.* Austin, TX: Author.
- What Works Clearinghouse [WWC]. (2008). *Procedures and standards handbook* (Version 2.0). Available for download at: http://ies.ed.gov/ncee/wwc/references/idocviewer/doc.aspx?docid=19&tocid=1http://ies.ed.gov/ ncee/wwc/references/idocviewer/Doc.aspx?docId=19&tocId=4
- Wong, B. Y. L. (1979). Increasing retention of main ideas through questioning strategies. *Learning Disability Quarterly, 2,* 42–47.
- Xin J. F., & Reith, H. (2001). Video-assisted vocabulary instruction for elementary school students with learning disabilities. *Information Technology in Childhood Education Annual, 1,* 87–103.
- Zahorik, J. A. (1996). Elementary and secondary teachers' reports of how they make learning interesting. *The Elementary School Journal, 96*, 551–565.

APPENDIX:

A Useful Companion: Aligning Bringing Literacy Strategies into Content Teaching with Effective Instruction for Struggling Adolescent Readers—PD Module

A useful companion

The Center on Instruction's publication on using literacy strategies with secondary school students—*Bringing Literacy Strategies into Content Instruction: Professional Learning for Secondary Level Teachers*—

http://centeroninstruction.org/files/Bringing%20Literacy%20Strategies%20into%20Content%2 Olnstruction.pdf —is a natural supplement to *Effective Instruction for Struggling Adolescent Readers Professional: Development Module*. It reviews the research bases to support instruction in vocabulary and comprehension as well as the research on professional development to guide teachers and schools in crafting support for teaching higher-order thinking and literacy skills to adolescents. Several strategies highlighted in *Bringing Literacy Strategies into Content Instruction* are treated in more detail, and with a sharper focus on meeting the needs of struggling readers, in *Effective Instruction for Struggling Adolescent Readers: Professional Development Module*.

The chart below shows which EIASR slides and speaker notes pertain to strategies described in *Bringing Literacy Strategies into Content Instruction*.

	Bringing literacy strategies in content instruction	Effective Instruction for Adolescent Struggling Readers Professional Development Module—Second Edition
Area of literacy	Topic (Page number)	Slide numbers: Topic
VOCABULARY	Instruction in and multiple exposure to individual words (pp. 16–17)	 Slides 26–28: Direct instruction of specific words Slides 31–25 and 36–39: Selecting vocabulary words
	Instruction in word learning strategies (pp. 17–20)	• Slides 29–30 and 39: Direct instruction of strategies to promote independent vocabulary acquisition
READING COMPREHENSION	Asking questions (pp. 51–52)	• Slides 52–60: Asking and answering questions
	Monitoring comprehension (pp. 52–54)	Slides 70–74: Main Idea
	Summarization and using graphic organizer (pp. 54–56)	Slides 62–86: Graphic organizersSlides 75–80: Summarization

