SIM® supports for writing in general education classes

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In 2007, *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools* warned that American students are not meeting basic writing standards. Unfortunately, this comes as no surprise. In 2003, the National Assessment of Educational Progress—the Nation's Report Card—reported that only 24 to 31 percent of students in grades 4, 8, and 12 met writing proficiency goals. As the nation's schools attempt to address these deficiencies, all teachers—including content-area teachers—must help students respond to the literacy challenge of writing well, yet many are not adequately prepared to take on such a role.

Writing Next, funded by the Carnegie Corporation of New York and written by Steve Graham and Dolores Perin, recommends 11 research-validated elements of effective writing instruction for adolescents. Several of these elements are integral to components of the Strategic Instruction Model®.

The SIM® strategies for improving student writing are well known. These strategies—*Fundamentals* and *Proficiency in Sentence Writing, Paragraph Writing,* and more—were designed for use in one-to-one or small-group instruction, which is not usually feasible in a general education content class.

What is less well known is that many of SIM's Content Enhancement devices—specifically designed for use in content classes—contain elements that support students as they respond to both writing and content requirements in their classes and as they strive to meet national education standards.

As a *research* center, we don't like to make claims like that if we can't back them up with solid data and statistical analysis. So, we recently conducted a research study to examine the effectiveness of the *Question Exploration Routine*—and especially the Question Exploration Guide graphic device—to enhance students' content knowledge *and* the quality of their written responses to an essay question.

Our results, which we'll talk about in more detail later, showed significant differences between experimental and control groups in regard to knowledge and comprehension of content and the quality of students' written responses to a question in favor of the experimental group that was taught using the *Question Exploration Routine* and guide.

THE STUDY

Our study consisted of 36 students in grades 9 to 12 attending an inner-

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city school. Students were randomly assigned to either an experimental group or a control group using a "stratification" procedure to help ensure a balance in the number of general education students and students with learning disabilities in each group.

To mimic a real-world situation as closely as possible, we identified a topic that was similar to one students might be expected to understand and write about but that had not been covered in any of their courses so far. The lesson we chose focused on the problem, causes, effects, and solutions related to the depletion of the ozone layer in the Earth's atmosphere, and how problems with the ozone layer teach us about human effects on the environment. Information for the lesson was drawn from "The Ozone Layer," a 30-minute film in the Schlessinger Video Productions' environmental video series, *The Earth at Risk.* The main points and important details from the film were incorporated into a lecture similar to one the students' teachers might give. No other materials were added to the lecture or the Question Exploration Guide subsequently constructed with the experimental group.

We spent two days working with students for this study. On the first day, all 36 of the students came together in the library to hear Jan Bulgren's 30-minute lecture. She told them to take notes and to be prepared to write an essay. After the lecture, she gave them five minutes to study their notes and then half an hour to write an essay in response to a question: *How do problems with the ozone layer teach us about human effects on our environment?*

On the second day, students in the control group returned to the library to watch the Schlessinger video. They essentially viewed the same information that Jan had included in her previous lecture, but in a different format that should have held interest for them. At the end of the video, a research assistant talked briefly about the components of a good essay—topic sentence, body, and conclusion—and then gave students 30 minutes to respond to the same essay question.

At the same time but in a separate room, the students in the experimental group and Jan developed a Question Exploration Guide using no materials other than the students' memories of the lecture. After they finished the guide, Jan briefly explained how it could be used to support writing an essay (topic sentence, body, conclusion), then gave students 30 minutes to respond to the essay question.

Two high school teachers certified in the use of 6-Trait® Writing (now 6+1 Trait® Writing) scored the quality of writing in the essays.

6-Trait Writing sets criteria for scoring essays based on ideas, organization, voice, word choice, sentence fluency, and conventions (6+1 Trait adds a seventh characteristic: presentation). The essays also received a score (five points possible) for knowledge

6+1 Trait® Writing, developed by Northwest Regional Educational Laboratory (NWREL). More information: www.nwrel.org. See "Products" or search for "6+1 Trait."

Figure 1: Content scores
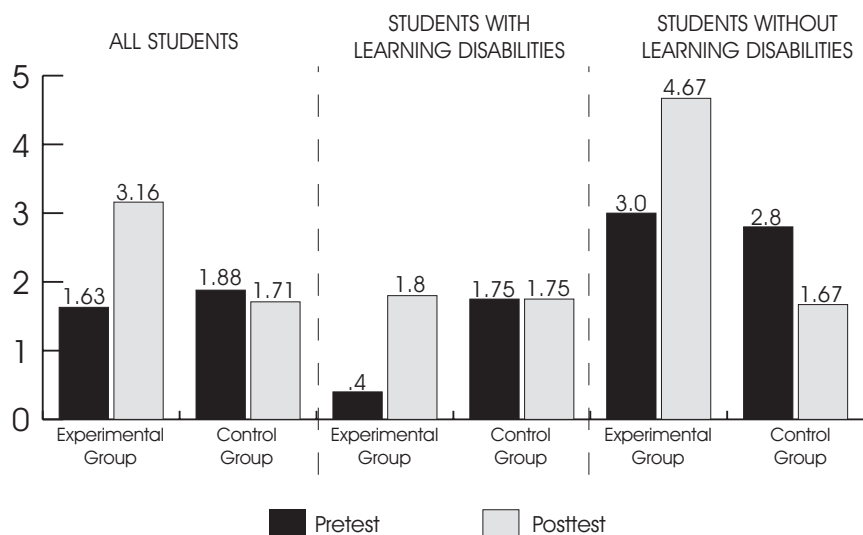
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> **Effect size:** A measure of student performance in relation to use of an intervention. Higher effect sizes associated with an intervention equate to better student performance.

and comprehension of content.

THE RESULTS

Content. Overall, the content scores for the experimental group improved, from 1.63 on the pretest to 3.16 on the posttest, while control group scores declined slightly from 1.88 to 1.71. Scores of students with learning disabilities in the experimental group improved from .4 on the pretest to 1.8 on the posttest, while scores of students with learning disabilities in the control group held steady at 1.75. The difference in pretest and posttest scores for students in the experimental group represents a medium to large effect size; however, the difference in posttest scores for students with learning disabilities in the experimental group and in the control group was not statistically significant, but this could be due to the small number of students in this condition.

Content scores for the general education students in the control group decreased slightly, from 2.0 to 1.67; general education students in the experimental group exhibited more than 50 percent improvement over their pretest scores, from 3.0 to 4.67, resulting in a very large effect size. The difference in posttest scores between experimental and control groups were statistically significant, meaning the difference can be attributed to the use of the *Question Exploration Routine* and guide.

Writing quality. Overall, writing quality scores (using the 6-Trait Writing assessment) improved for students in the experimental group, from 2.68 on the pretest to 3.33 on the posttest, but declined for students in the control group, from 2.70 to 2.47. The increase from pretest to posttest for the experimental group represents a very large effect size, and the difference between posttest scores for the two groups is statistically significant.

For students with learning disabilities in the experimental group, 6-Trait scores improved from 2.17 on the pretest to 2.90 on the posttest, resulting in a very large effect size. Scores for students with learning disabilities in the control group declined from 2.54 to 2.27. Again, the difference between posttest scores for the two groups is statistically significant.

Students without learning disabilities in the experimental group improved their 6-Trait scores, from 3.26 to 3.81, resulting in a very large effect size. Scores for students without learning disabilities in the control group declined, from 2.83 to 2.65. The difference between experimental and control group posttest scores is statistically significant.

BENEFITS

This study addressed the role that Content Enhancement—particularly the *Question Exploration Routine*—can play in supporting student writing. Already proven effective in helping students of diverse abilities respond to content understanding demands in their general education classes, Content Enhancement now embraces another important instructional dimension.

The *Question Exploration Routine* and its graphic device incor-

Figure 2: Writing quality scores
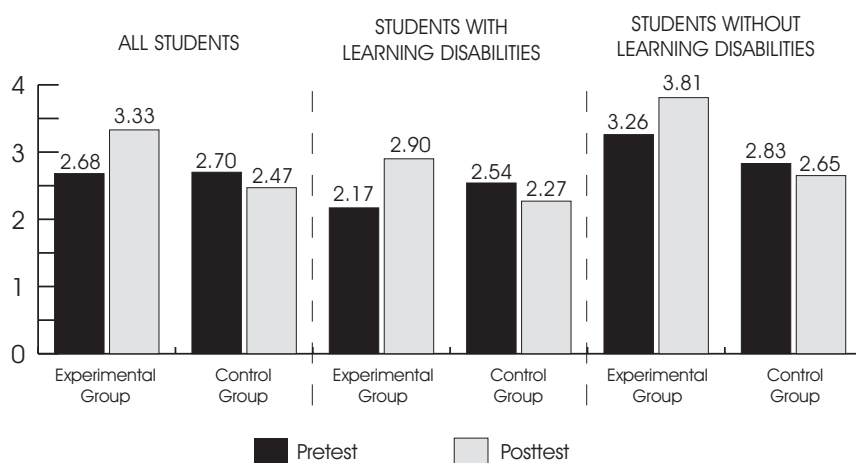
WRITING SUPPORTS
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porate several of the writing elements recommended by *Writing Next,* including prewriting (activities that help generate or organize ideas), inquiry activities (analyzing material to help develop ideas and content), and writing for content learning.

We learned several things from this study about the ways in which Content Enhancement can help students improve their writing.

The routines promote critical thinking and reasoning, which students must engage in as they write. Using the *Question Exploration Routine,* teachers and students can construct the guide in ways that support different expository text structures, such as compare-and-contrast or cause-and-effect. Throughout the process of developing the guide, teachers and students talk together in ways that help students understand the content. At the same time, teachers

can reiterate text structures and focus on reasoning structures. The built-in cognitive prompts and steps of the routine reinforce these critical thinking and reasoning skills.

In this study, students with wide-ranging abilities were able to express themselves better in writing in regard to complex and important issues facing our world today. The improved scores—both content knowledge and quality of writing—of students in the experimental group are particularly striking considering the minimal amount of instructional time spent in teaching students how to use the Question Exploration Guide in this way.

CONCLUSION

Many teachers and an even greater number of students are struggling in the face of increased emphasis on writing. Very few students meet writing proficiency goals, yet they increasingly must demonstrate

their content knowledge through writing, including on high-stakes assessments. Their teachers are unprepared and ill-equipped to support writing instruction in addition to promoting content learning.

Teachers who adopt Content Enhancement methods in their classroom have an array of tools to help them plan, organize, and present content in ways that are helpful to all students, regardless of ability. Now, Content Enhancement—particularly the *Question Exploration Routine*— offers a means for teachers to address the literacy demands related to student writing.

Their students, in turn, can use the routine and the Question Exploration Guide to help them plan, explore, and organize their thoughts as they prepare to write. This study affirms the benefits of increased understanding of content and better quality of written products when teachers use the Question Exploration Guide as a writing scaffold.

NEW IN 2009: SIM® FOR ADMINISTRATORS

8 a.m. June 23 to noon June 25 • University of Kansas, Lawrence, Kansas
$500; after May 24, add $25 ($525) • Registration is limited to 20 people
Download registration form: http://www.kucrl.org/institutes

This institute is offered for administrators who desire to know more about the Strategic Instruction Model® (SIM), how it is implemented, and the administrative support and accountability pieces necessary to ensure implementation. Led by Rosalind Davenport, a SIM Professional Developer and former school and district administrator, the institute will focus on

the Content Literacy Continuum® (CLC), leadership, change, and SIM Content Enhancement (CE) Routines and Learning Strategies. Administrators will learn two CE routines that will be useful in their own work and have an opportunity to interact with teachers participating in the Content Enhancement Institute. KU-CRL researchers will participate.

Optional: Interested administrators also may participate in the afternoon session of the classroom teacher course (Level One Content Enhancement) for no additional fee. The afternoon session will be a debrief and discussion of the integration of Content Enhancement Routines. The session will finish by 4 p.m.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES 2009
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The University of Kansas Center for Research on Learning invites you to explore effective instructional methods through our series of institutes geared toward classroom teachers, higher education faculty, and instructional coaches. These institutes are practical, hands-on experiences that will enable you to implement Strategic Instruction Model® (SIM) interventions or instructional coaching methods effectively. For experienced SIM teachers who successfully complete an application process, we offer an institute to begin the process for SIM Professional Developer certification.

FOR COLLEGE/ UNIVERSITY FACULTY

SIM Learning Strategies Institute for Preservice Educators
$975 (after April 26: $1,000)
May 26-30, 2009

Teaching Content to All: Content Enhancement for Preservice Educators
$975 (after April 26: $1,000)
May 26-30, 2009

FOR CLASSROOM TEACHERS

SIM Strategies for Reading and Writing
$675 (after May 16: $700)
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More SIM Strategies
$675 (after May 16: $700)
June 16-19, 2009

SIM Institute: Introduction to Teaching with Content Enhancement
$675 (after May 23: $700)
June 23-26, 2009

FOR ADMINISTRATORS

SIM for Administrators
$500 (after May 23: $525)
Registration is limited to 20
June 24-26, 2009

FOR POTENTIAL PROFESSIONAL DEVELOPERS

Institute for Potential SIM Professional Developers in Learning Strategies
$800
June 22-26, 2009

INSTRUCTIONAL COACHING

Instructional Coaching Institute, Level 1
$450
Choice of three dates in 2009:
January 12-14, 2009
August 10-12, 2009
October 5-7, 2009

Instructional Coaching Institute, Level 2
$450
Choice of three dates in 2009:
March 12-14, 2009
August 12-15, 2009
October 8-10, 2009

STRATEPEDIA WEBINARS
http://webinars.stratepedia.org

In recent months, the Stratepedia team has produced a series of webinars demonstrating how to use SIM-related technology. View these demonstrations in the archives section of webinars.stratepedia.org.

To be among the first to know when future webinars will be offered, follow Hello, the Stratepedia blog:
http://hello.stratepedia.org/

Archived webinars
GIST Basics
Basic activities required to successfully work with GIST are covered in this short webinar. Skills include accessing and saving templates; adding and editing text; working with shapes; and using connector lines.

GIST Advanced
This short webinar demonstrates more advanced tools available in GIST, including linking, layering, and adding an image.

Coming soon
Stratepedia Depot: Best Practices
We'll discuss how to share your Content Enhancement examples with others, how to use keywords to link related examples, how to provide feedback, and plans for Depot's future.

Online Collaboration with Stratepedia Learning Labs
We'll discuss the philosophy behind the Learning Labs, show a few examples of collaborative groups using the system, and introduce you to a few power tools to enhance your group's use of the Learning Labs.

SIM
Strategic Instruction Model®

A CLC® Tree Grows in Michigan
## Team's dedication, drive nurture program

Congratulations to the Holland Professional Developer Cadre in Holland, Mich.! The team is making great progress with the implementation of the Content Literacy Continuum® in Holland Public Schools. In a recent presentation to the board of education, team members compared CLC in Holland to a growing tree, as shown in the illustration.

"Every time I talk and meet with the Holland Professional Developer Cadre, I am more and more impressed with their dedication, drive, and professionalism. What an awesome group!" says veteran SIM Professional Developer Sue Woodruff, who works with the team.

In addition to designing the tree graphic, the team prepared a short slide presentation, a clever Concept Anchoring Device explaining CLC, and a video featuring statements from students, teachers, and principals.

"It was really exciting to see what they did, and I am so proud to be working with them," Sue says.

(Thank you to Sue Woodruff for sharing this story and graphic.)
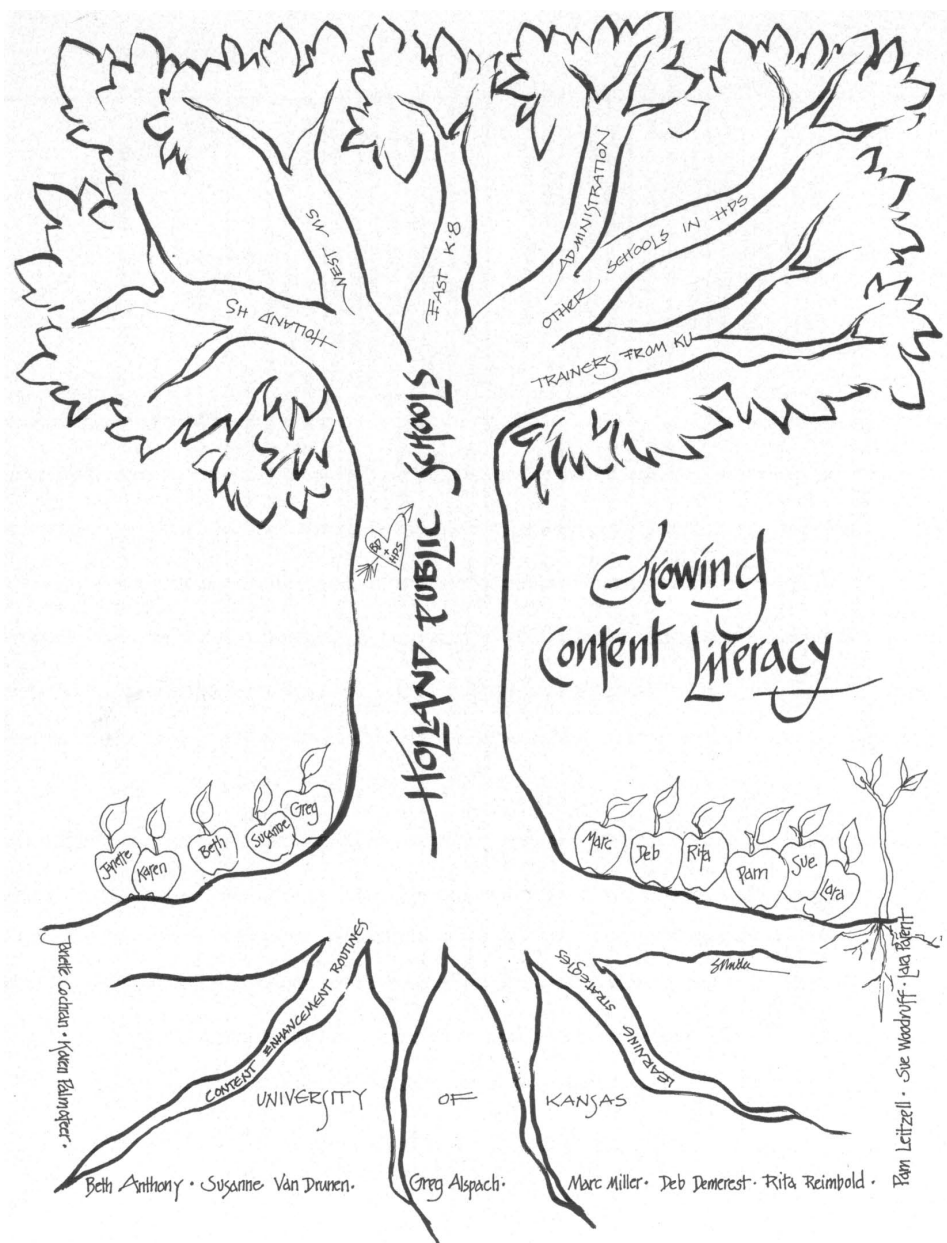
Stratereaders Virtual Book Club

Stratereaders, the interactive, virtual book club, focuses on literature addressing our changing world, implications for education, professional development, leadership, and educational reform.

WHO: SIM Professional Developers, SIM educators, book study groups, and anyone interested in reading and contributing.

WHEN: The club reads a new book every two months from September through May.

HOW: Log on to www.stratepedia.org, then click on Stratereaders to contribute your thoughts and ideas. A conference call will be held at the end of each reading period to discuss the featured book. Watch your e-mail (SIMTRAINER-L listserve) for information about participating in each call.

FEBRUARY-MARCH BOOK SELECTION

The Tipping Point: How Little Things Can Make a Big Difference by Malcolm Gladwell

<u>April-May:</u> *Crucial Conversations: Tools for Talking When Stakes Are High* by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler

KU-CRL Calendar

March 12-14, 2009
Instructional Coaching Institute, Level 2
Lawrence, Kan.

May 26-30, 2009
SIM Learning Strategies Institute for Preservice Educators
Lawrence, Kan.

May 26-30, 2009
Teaching Content to All: Content Enhancement for Preservice Educators
Lawrence, Kan.

June 16-19, 2009
SIM Strategies for Reading and Writing
Lawrence, Kan.

June 16-19, 2009
More SIM Strategies
Lawrence, Kan.

June 22-26, 2009
Institute for Potential Professional Developers in Learning Strategies
Lawrence, Kan.

June 23-26, 2009
SIM Institute: Introduction to Teaching with Content Enhancement
Lawrence, Kan.

June 24-26, 2009
SIM for Administrators
Lawrence, Kan.

August 10-12, 2009
Instructional Coaching Institute, Level 1
Lawrence, Kan.

August 12-15, 2009
Instructional Coaching Institute, Level 2
Lawrence, Kan.

October 5-7, 2009
Instructional Coaching Institute, Level 1
Lawrence, Kan.

October 8-10, 2009
Instructional Coaching Institute, Level 2
Lawrence, Kan.

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e-Learning Design Laboratory
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Institute for Research on Adolescent Learning

Kansas Coaching Project
http://www.instructional-coach.org

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CRL Learns

CRL Learns is a new initiative designed to promote dialogue, professional learning, and innovation. You can join in at the CRL Learns web site: watch videos from guest lectures and other events and join the discussions. Look for more about CRL Learns in future issues of *Strategram*.

http://crllearns.kucrl.org

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