



TEACHING AND LEARNING RESEARCH EXCHANGE

Updated Report on Guided Reading Strategies to Improve Students' Critical Thinking Skills in Grades 3, 4 and 5

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Executive Summary

Four teachers at St. Olivier School in Radville, Saskatchewan, continued to collaborate during the 2008-09 school year in order to investigate additional ways that guided reading strategies could be used to improve critical thinking skills with their students in grades 3 to 5. The project was both data-driven and student-centered and was designed to expand the researchers' teaching practices and improve students' ability to think critically. The project follows action research on this topic that was conducted over the previous two years.

Given both improved student outcomes and the researchers' increased comfort levels teaching guided reading, the researchers decided to try something new: multi-grade groupings. It was determined that a theme approach using printable books and lessons from the website (<http://www.readinga-z.com/>) would be used. Instruction would be provided once a month on selected Fridays. As they had in the past, the researchers planned to employ a variety of informal assessments to determine students' reading levels and ability groupings as well as to measure their students' progress.

In addition to continuing on with whole class novel studies and literature circles within the classroom, the project provided the opportunity to do some co-teaching in grades 3 and 4. While the classroom teacher worked with a group in the classroom, the student services teacher worked with another group in the library for a folktale unit using guided reading strategies in Grade 3 and also for a unit on First Nations legends in Grade 4.

Although the researchers were unable to get multi-grade groupings for guided reading off the ground due to several reasons, there were many positive outcomes of this research and it was still deemed worthwhile. Researcher reflections revealed that their previous findings were not only confirmed; some new discoveries were also made.

The response to co-teaching guided reading and using literature circles was very favourable since there were not only positive student outcomes, but also a considerable amount of professional growth for the researchers as well. The students learned responsibility and independence in their guided reading groups as well as more about each other. It helped build students' success and confidence in their abilities to think more critically. When the data was examined at the end of the year, many students achieved a year's growth on the Star test (an online, timed close test from Renaissance Learning). The researchers appreciated the structure that guided reading provided students along with the flexibility that allowed each researcher to use her own teaching style. They also found out more about how students think as the students learned to dig deeper and use critical thinking skills with their peers within their own classroom setting. The researchers look forward to doing more co-teaching and using guided reading strategies with other students in the future.

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Thanks also go to the students in grades 3, 4 and 5 who continued to inspire us with their thinking, discussions, questions and learning.

And last but not least, thanks to the Dr. Stirling McDowell Foundation for Research Into Teaching that allowed us to carry over funds to continue our research on guided reading.

Update

THE RESEARCHERS

Four researchers from St. Olivier School: Lori, the Grade 3 teacher; Sherrill, the Grade 4 teacher; Lorrie, the Grade 5 teacher; and Jocelyn, the student services teacher continued to collaborate on this project during the 2008-09 school year.

THE LEARNING COMMUNITY

There were 19 students in the Grade 3 class, 18 students in the Grade 4 class and 19 students in the Grade 5 class.

RESEARCH QUESTION

How can guided reading strategies be used to improve students' critical thinking skills in grades 3, 4 and 5?

BACKGROUND

The action research project continued with a slightly different focus in the 2008-09 school year. At the end of September, the three researchers from grades 3, 4 and 5 met with the student services teacher for an afternoon planning session to determine what form guided reading would take and ways they could collaborate throughout the year. After having conducted action research on this topic over the past two years, and given both improved student outcomes and the researchers' increased comfort levels with guided reading, the researchers were looking forward to teaching guided reading strategies again within their own classrooms. Specific plans involved folktales and a novel study in Grade 3, First Nations legends and a novel study in Grade 4, as well as literature circles in Grade 5. Equipped with first-hand knowledge, observations and discussions with the staff at Sacred Heart School in Regina as an exemplary model of what another school was doing in the area of guided reading along with the project's previous findings and successes as a foundation to build on, the researchers decided they were ready to try something new: multi-grade groupings.

ADDITIONAL QUESTIONS

This plan raised some additional questions:

- What would guided reading be like with multi-grade groupings?
- How would students accept these kinds of groupings?
- How would teachers share the assessment process?
- How much would student outcomes improve?

GUIDED READING SCHEDULE

Within the four-day alternate week schedule, the researchers made plans to deliver guided reading instruction once a month on several days when there was school on a Friday. Days were spread throughout the year on January 16, February 6, April 24, May 8 and 29. Scheduled time included 40 minutes before morning recess from 9:45 to 10:25 and also time later in the day from 3:00 to 3:25 to wrap up lessons before the weekend. These times were chosen since the student services teacher and two educational assistants were available, during these times, to help.

A THEME APPROACH USING PRINTABLE BOOKS

Themes that appealed to students' interests such as Animals, Winter and Character Education were identified. The researchers agreed they should continue to use books from the website (<http://www.readinga-z.com/>) since it provided: highly structured, ready-made lesson plans with explicit instruction for pre-reading, during reading and after reading activities; teacher modeling using think-alouds; many opportunities for student discussions, critical thinking at the end of the Leveled Reader Quick Checks in the form of extended responses; and enough copies of the selected books for each student.

INFORMAL ASSESSMENTS

Assessment for learning continued along the same lines as in previous research. The researchers used a variety of informal assessments to determine students' reading levels including results from: the beginning of the year Star test and Accelerated Reader online quizzes; the Alberta Diagnostic Reading Inventory; and the San Diego Quick Word Assessment which was used only in Grade 3. An analysis of the results showed that the majority of students in Grade 5 were reading below grade level on the Star reading test. However, once these initial benchmarks were created, the researchers were excited to teach guided reading. The researchers decided to group the students according to their reading level, based on their results on these informal assessments, as they had in past research. They looked forward to developing students' critical thinking skills and expanding their research with multi-grade groupings.

Grade 3 Approaches to Guided Reading and Reflections

There were two approaches used in Grade 3. The Grade 3 researcher and the student services teacher teamed up to teach guided reading. They divided the class into two groups based on their reading levels. As part of a unit on Folktales, printable books from the website (<http://www.readinga-z.com/>) were used to meet the students' needs. The folktales *How Robin Stole Fire* and *Coyote and the Star* were chosen. While the Grade 3 researcher worked with a group in the classroom, the student services teacher worked with the other group at tables in the library.

Guided reading was very manageable and worked well with co-teaching and the structured lessons. The direct teaching approach helped the students develop a variety of skills including their vocabulary skills, higher level thinking skills and their small group discussion skills. Students looked forward to guided reading, and they enjoyed using sticky notes to mark any new words they encountered while reading. At least 30 minutes at a time and more than one day in a row seemed to best support this. Students appeared to focus better in the small group setting, and it was easier to provide them with immediate feedback. However, it was challenging for students to catch up when they were absent for two or more consecutive days. The researchers made plans to co-teach guided reading using this approach again in 2009-10.

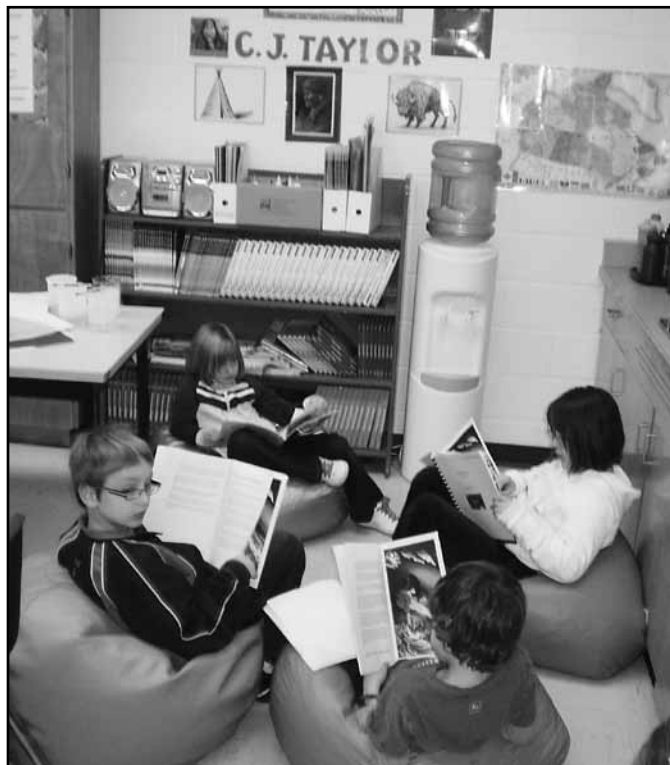
The Grade 3 researcher also used visualization as a strategy to teach guided reading. Visualization was used when she read the novel, *Owls in the Family* (1970) by Farley Mowat, aloud to the class. After every other chapter, students were asked to close their eyes, visualize what had happened in the chapter and to illustrate it. The results were remarkable. Students completed a story map for the chapters that were not illustrated. The story map was an excellent tool for summarizing and sequencing events in the novel. The researcher plans to continue having students use the visualization strategy with the novel, *Fantastic Mr. Fox* (1970) by Roald Dahl, during the 2009-10 school year.

Grade 4 Approaches to Guided Reading and Reflections

There were two approaches used to teach guided reading in Grade 4. The students read the novel, *Stone Fox* (1980) by John Reynolds Gardiner, with the Grade 4 researcher. One of the activities involved relating the story to their own lives. For example, students had to write about how they would raise five hundred dollars and how they are responsible like the character, Willie, in the book. Students also predicted what would happen in the next chapter and wrote about how they felt about certain situations in the book.

The Grade 4 researcher learned that students usually enjoy relating a novel to their own lives because it makes the book more realistic and interesting to them. She also learned that it was not extra work to add the elements of predicting and relating text to their own experiences into a regular novel study.

The other approach involved co-teaching. The student services teacher and the Grade 4 researcher teamed up and used a teacher-created unit, "Meet the Author C. J. Taylor Using Legends and Web Sites" to teach critical thinking. Guided reading lesson plan sheets (from <http://www.mandygregory.com>) were introduced to share the teaching of this unit. Students were split into three groups based on their beginning of the year reading assessments. While the Grade 4 researcher worked with one group in the library, the other researcher worked with the other two groups in the classroom. Lessons were facilitated after morning recess and lasted for about 40 minutes.



A Grade 4 Group Reading Legends

The Grade 4 researcher found that the students enjoyed being split into groups, rather than always working with the whole class. Plus, it seemed to inspire the group members because they had an opportunity to work with other students at the same reading level.

The student services teacher discovered that guided reading appears to work naturally for some groups of students since it helps teach them to be more independent and to stay focused especially when the teacher is working with another group of students. Each teacher brings her own teaching style to guided reading. It really allows each teacher to be herself. It was interesting to see the other researcher's favorable response to guided reading: the built-in structure of this approach as well as the positive student outcomes.

Students had the opportunity to share their opinions in small group discussions and to learn a lot both from each other and about each other. The researchers thought more about how students think while the students dug deeper and used critical thinking skills.

Grade 5 Approach to Guided Reading and Reflections

The Grade 5 researcher continued teaching guided reading strategies with the use of literature circles. Students were divided into four small groups based on their reading levels. As part of a five-week Fantasy unit, the novels *Could Dracula Live in Woodford?* (1988) by Mary Howarth, *Alison's Ghosts* (1984) by Canadian authors Mary Alice and John Downie, *Tuck Everlasting* (1975) by Natalie Babbitt, and *A Stranger Came Ashore* (1975) by Mollie Hunter were chosen. Students were assigned a variety of roles. These included: Discussion Director, Summarizer, Illustrator, Connector, Vocabulary Builder and Scene Setter. Students worked on vocabulary building, reading aloud, comprehension building and presenting the novels creatively with either a board game or a puppet show.

The Grade 5 students loved the independence that the guided reading program offered. They were excited to facilitate their own learning with grade-alike reading levels and peers reading at the same level. They were very responsible and did a great job leading their groups. The teacher could observe students more informally in the small group discussions. The program was a great confidence builder since all students were successful within the classroom setting.

Limitations

Unfortunately, the researchers were not able to get guided reading using multi-grade groupings off the ground. There appeared to be several reasons for this. Fridays did not seem to be a good time to teach guided reading. By the end of several busy five-day weeks in a row with an additional 29 minutes a day, both students and teachers appeared to lack the energy to tackle something new. Two of the researchers were busy trying to implement a new math program, and demands on the student services teacher's time meant that the time scheduled for guided reading was used to meet the needs of individual students instead. However, learning in the area of critical thinking did occur and it can be described as follows.

Assessment of Learning Using the Star Test

The additional practice using guided reading strategies, by building on what had been taught before, definitely benefited our students. A marked improvement was noticed in their ability to think critically. While teachers used a variety of different ways to assess students' critical thinking skills, one method that was used consistently to measure their reading growth was the Star reading test. It was given to all the grades 3, 4 and 5 students in August, before reporting periods, and again in June. Grade equivalent scores from the Star test were used to compare students' progress not because these scores indicated the precise reading level that students were reading at, but to see which students demonstrated at least a year's growth.

FIGURE 1.
THE PERCENTAGE OF STUDENTS WHO IMPROVED

	Grade 3	Grade 4	Grade 5	Total Students
Girls	67	80	18	56
Boys	86	25	50	53
Total Students	74	56	32	54

St. Olivier School, June 2009

Figure 1. The percentage of students in grades 3, 4 and 5 who improved at least a grade level on the year-end Star test. "Updated Report on Guided Reading Strategies to Improve Students' Critical Thinking Skills in Grades 3, 4 and 5," by J. Olson, L. Larsen, L. Bolton and S. Verhelst, 2010. Copyright 2010 by J. Olson et al.

A closer look at the results revealed that the majority of the Grade 3 students improved a grade level (74%), as did just a little more than half of the Grade 4 students (56%). Less than half of the Grade 5 students (32%) managed to improve a grade level as shown in Figure 1. On the one hand, the grades 3 and 5 boys did better at improving a grade level on the Star at 86% and 50%, respectively, than the girls did at 67% in Grade 3 and 18% in Grade 5. On the other hand, the Grade 4 girls, at 80%, out-performed the Grade 4 boys, at 25%, by a large margin. However, overall, the total number of girls and boys improved almost the same percentage, with 56% of the girls improving and 53% of the boys improving at least a grade level.

As far as the percentage of students who were reading at grade level was concerned, many of the students who were not reading at grade level in August on the Star test were doing so by the end of the year, as indicated in the following table. Grade equivalent (GE) scores from the Star reports were used to determine the amount of progress students had made. This progress was considered important since some of the students who did not achieve a year's growth on the Star test were already reading at grade level or above. While other assessments were considered to determine the level a student was reading at, for the purpose of this research, grade equivalents included the beginning of the grade level; for instance, GE 3.0 to the end of the grade level, in this case, GE 3.9.

FIGURE 2.
THE PERCENTAGE OF STUDENTS READING AT GRADE LEVEL

	Grade 3		Grade 4		Grade 5		Total Students	
Girls	58	83	70	80	45	27	55	64
Boys	29	57	63	50	25	38	25	43
Total	47	68	67	72	37	32	50	57
	Aug.	June	Aug.	June	Aug.	June	Aug.	June

St. Olivier School, June 2009

Figure 2. The percentage of students in Grades 3, 4 and 5 reading at grade level on the beginning and year-end Star test. "Updated Report on Guided Reading Strategies to Improve Students' Critical Thinking Skills in Grades 3, 4 and 5," by J. Olson, L. Larsen, L. Bolton and S. Verhelst, 2010. Copyright 2010 by J. Olson et al.

An analysis of the data revealed that overall 50% of the students in grades 3, 4 and 5 were reading at grade level on the Star test in August. This compared to a slight improvement of 57% of the students at grade level in June. The most progress was made by the Grade 3 boys who increased from 29% of them reading at grade level in August to 57% of them or a difference of 28% in June. The total number of boys in all three grades made the most progress compared to the total number of girls by moving from 25% in August to 43% or a difference of 18% on reading at grade level on the Star. As to the other grades, the girls in Grade 4 made the biggest gains of 10% in reading at grade level on the Star test by moving up from 70% in August to 80% in June.

Summary of the Researchers' Findings

This year's research confirmed many of our previous findings about teaching critical thinking skills using guided reading strategies. Instead of a single approach there were many approaches to teaching critical thinking skills. The researchers used many of the strategies that were common in our literature review on guided reading. Specifically they employed:

- Visualizing or making a movie in one's mind.
- Background vocabulary instruction.
- Graphic organizers (story maps, in particular).
- Literature circles.
- Questioning when reading.
- Making connections with the characters.
- Retelling.
- Instruction on making inferences.

The project was deemed worthwhile, despite the fact the researchers did not get multi-grade grouping established. All teachers saw growth in student outcomes and plan to continue teaching guided reading strategies either by themselves or through co-teaching in the future.

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