

**Durham District
School Board
Anderson C.V.I.**



Improving Inferential Reading Comprehension Skills Among Grade Ten Reluctant/Struggling Readers

Joanne Docherty,
Vice Principal, Anderson C.V.I.
(905) 668-5809, ext. 244,
joanne_docherty@durham.edu.on.ca
Sandra McEwan,
Science Teacher, Anderson C.V.I.



Title of Research Project:
Improving Inferential Reading Comprehension Skills Among Grade Ten Reluctant/Struggling Readers

Completed by: **Durham District School Board**

Joanne Docherty, Vice Principal, Anderson C.V.I. (905) 668-5809, ext. 244, joanne_docherty@durham.edu.on.ca
Sandra McEwan, Science Teacher, Anderson C.V.I.

Essential Question:

What pedagogically sound practices are most effective in improving the reading skill of understanding implicitly stated information and ideas (inferential comprehension) in a variety of texts for students in grade ten who are experiencing difficulty with reading?

Background:

The action research project originated from a review of EQAO data from the OSSLT. The purpose of the review was to identify patterns, trends and relationships. Data comparisons over time were reviewed. The population of first-time eligible students was the focus.

Unsuccessful Female Student (FTE):

"I have no idea what went wrong for me. I don't know which section. I'm not sure. Maybe I didn't write enough for an essay. I'm hoping I'm going to pass it this time. I'm going to try a lot harder. I tried it for the first time. I was nervous writing it the first time. It was obviously a big test. I assumed that I had passed. Yeh, it was a shock. I was stunned when I learned that I didn't pass. A couple of my friends failed it too. I failed only by ten marks. That's what I was most mad about. Pretty much the only thing I remember is that I failed by only ten marks! It made me so mad. I rush through reading. I don't take it all in. I completely forget what I just read. And I was nervous writing the test."

The data from the Ontario Secondary School Literacy Test (2007-2008) reported that 94% of fully participating FTE students at Anderson Collegiate Vocational Institute had been successful. Longitudinal data for 2003-2007 achievement for FTE students ranged in pass rates from 76% to 86%. In 2007 and 2008 EQAO detailed school results indicated that reading was an area of need more than writing.

Indeed, an analysis of disaggregated data from EQAO detailed school results on the 2008 OSSLT revealed that the greatest area of need among unsuccessful FTE students had been reading. Specifically the reading skill of understanding implicitly stated information and ideas (making inferences) had been the primary cause of student failure.

Eighteen questions on the OSSLT 2007 were coded as an evaluation of this reading skill. In 2007, a total of thirty students FTE and PE had answers that did not sufficiently show an understanding of implicitly stated ideas and information in different types of reading materials. On the OSSLT 2008, nineteen questions were coded as an evaluation of inferential reading. Seventeen of these questions were multiple-choice questions and two were open response questions. In 2008, a total of twenty students FTE and PE had answers that did not sufficiently show an understanding of implicitly stated ideas and information in different types of reading materials.

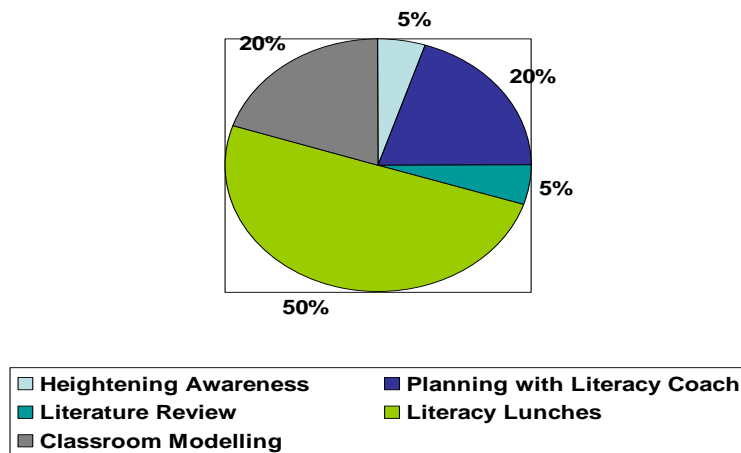
Given the results on the OSSLT 2008, a need for change in school-wide pedagogical practice in the key area of teaching reading skills was recognized as well as the need to develop a remediation program to better prepare students for the 2009 OSSLT. The goal, in the words of Richard Sagor (2005), is "universal student success," pg. 10. This demonstrative achievement/performance target was the driving force behind the quasi-experimental research. It involved both research in action and research for action.

With inferential reading as the targeted skill, a group of teachers began to reflect on the instructional strategies associated with it. Concurrently, a new innovative reading program was initiated that occurred after school and targeted students in grade ten who were recognized as struggling readers.

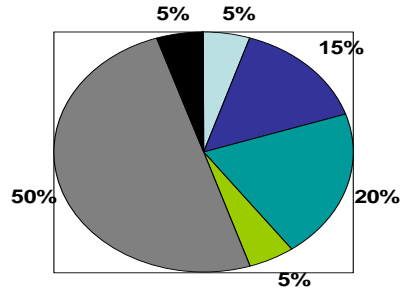
Figure 1.0 shows the overall time allocation required for each component of the action research project.

Figure 1.0 **Improving Inferential Reading Comprehension**

Professional Learning Community



After-School Reading Program



■ Search	■ Data Gathering
■ Diagnostic BRI	■ Communication with Parents
■ Reading Program	■ Incentives

RESEARCH FOR ACTION	RESEARCH IN ACTION
5% promoting PLC and getting support of 14 teachers	5% search for at-risk students
20% planning with DDSB Literacy Coach	15% data gathering for cohort of 45 students
5% ordering Literature Review Resources	20% diagnostic test of prerequisite skills
50% six Literacy Lunches	5% communication with parents and students
20% two classroom modeling lessons	50% reading program Nov. – Jan.
	5% incentives

Data Collection Methods and Analysis:

Data gathering began in late spring of 2008. A variety of data sources was employed. In an effort to prevent a reoccurrence of poor results on reading comprehension skills a search of students at-risk of failure on the 2009 OSSLT was conducted. This involved surveying grade nine teachers in June of 2008. Teachers were asked to identify students who had demonstrated difficulty in reading comprehension in their course of study. The characteristics of successful or unsuccessful students' work on the OSSLT became the criteria for selecting students who might be unsuccessful. The characteristics of unsuccessful students' work as outlined by the EQAO are simplicity, repetition, and concreteness versus the complexity, variety and abstraction demonstrated by successful students.

In September 2008, a follow-up survey was conducted with teachers of grade ten. A comprehensive list of students was compiled. A decision was made to focus on students who were not receiving support from Special Education. The rationale for this strategic decision was the concern that students deemed regular writers on the OSSLT

would receive no test accommodations and would have to be at an independent level of reading proficiency. Accordingly, these regular writers would be potentially at high risk of failing the OSSLT.

A total of 45 grade ten students were deemed to be at-risk of failure on the OSSLT. All would be categorized as having first-time eligibility on the 2009 OSSLT. More data gathering on the sub-group of students occurred with all relevant data being reviewed and analyzed. A detailed analysis of each student was compiled involving achievement and contextual data. The following data was gathered: number of teacher survey referrals, gender, elementary school, EQAO grade six reading and writing scores, current program level, credit accumulation to-date, semester one early progress report data, and semester one mid-term report and final report card data. The MISA data repository or warehouse was accessed to acquire historical data for a detailed analysis of individual students.

Thirty students were male and fifteen were female as illustrated in figure 1.1. Their average number of credits earned by the end of grade nine is illustrated in figure 1.2.

Figure 1.1 Number of Students

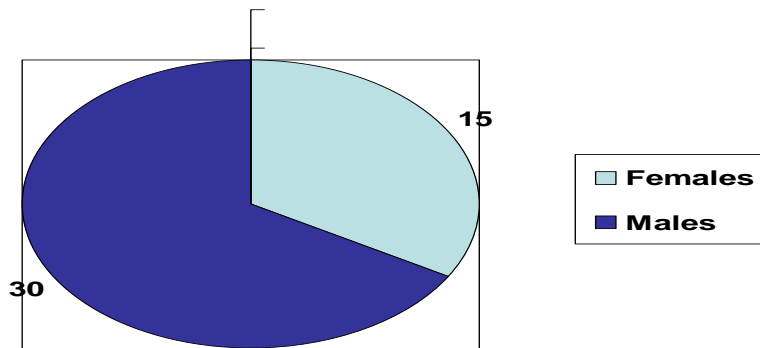
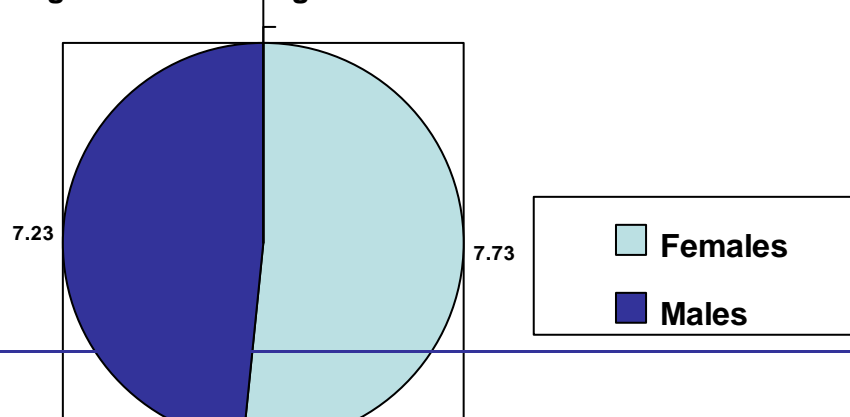
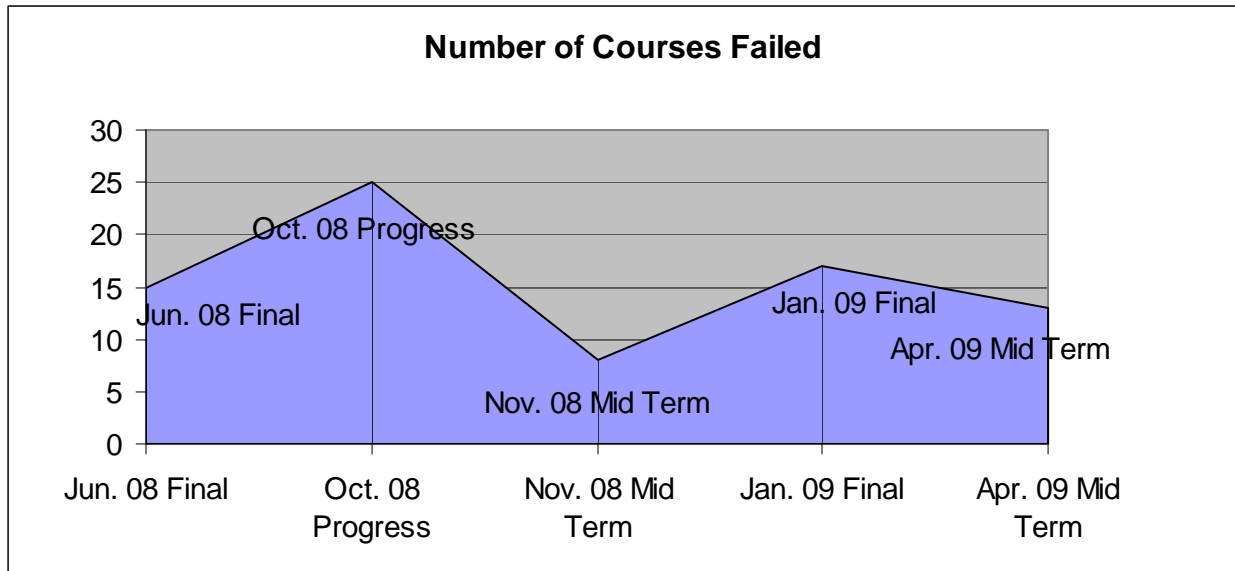


Figure 1.2 Average Number of Grade 9 Credits



The number of courses failed as indicated in Figure 1.3 show the achievement progress at critical evaluation times from June 2008 until April 2009. A trend toward achievement is noticed toward mid-term semester one and at mid-term semester two. This indicates that interventions must be occurring within daily instruction. However, the end of semester failure rate is still significantly high. It raises questions about what are the factors impacting student success at the end of semester.

Figure 1.3

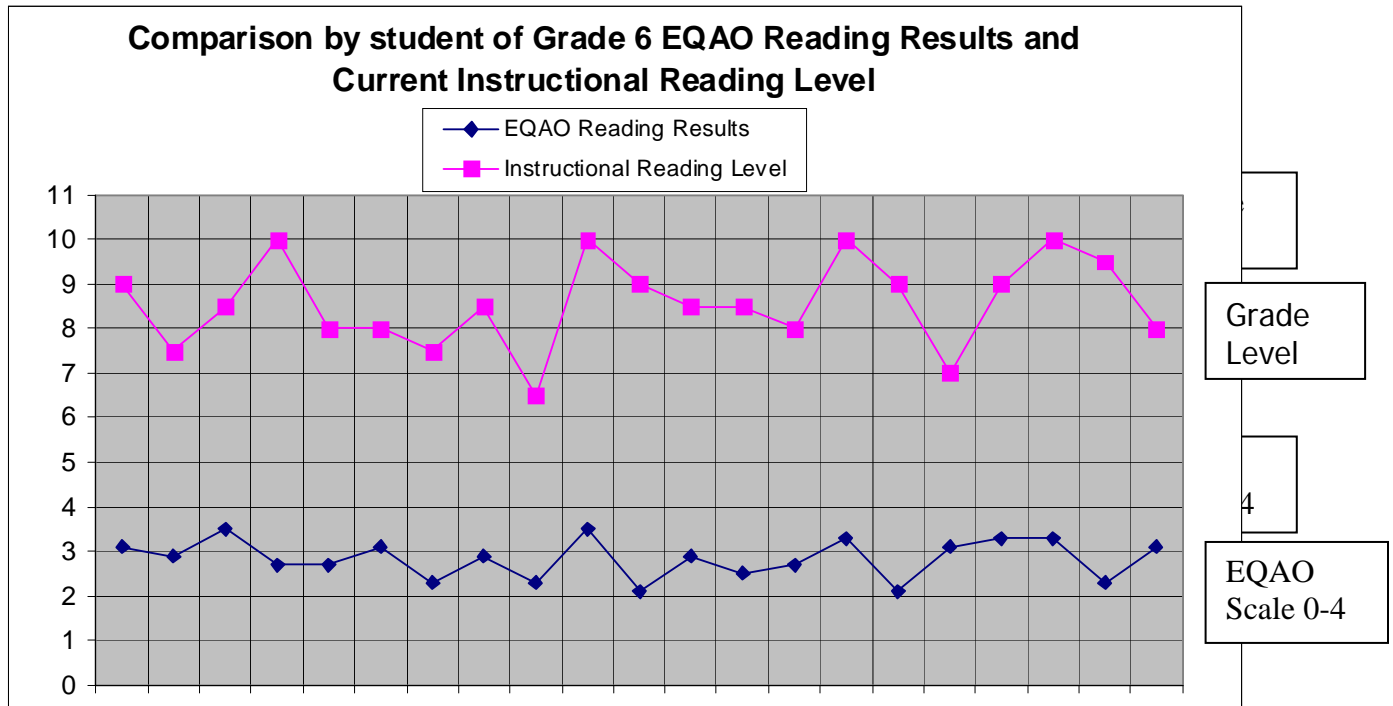


Between September and October 2008, a diagnostic test of prerequisite reading skills was conducted by the D.D.S.B. Literacy Coach, Nicole Dolabaille, with 34 of the 45 students on the at-risk list. The Basic Reading Inventory (BRI) administered involved three components. First was an assessment of word recognition/vocabulary. Second was an assessment of students' oral reading fluency. Third was an assessment of reading comprehension. The BRI assessment provided reading performance scores. It established an entry level benchmark for each student which indicated his or her instructional reading level. Reading levels ranged from instructional grade six/seven to instructional grade eleven. Results led to a reconsideration of the risk for potential failure on the 2009 OSSLT. Students most in need of remediation were targeted. Sixteen of the 34 students tested with the BRI were not performing at instructional grade level which was deemed to be grades 9/10. Thus their rate of growth in reading skills had not been appropriate. The goal was to have these students prepared to be successful on the April 2009 OSSLT.

Figure 1.4 illustrates a rate-of-growth chart from scores on EQAO grade six reading and writing assessments to the instructional level of reading measured on the BRI. Twenty-one students are represented on the rate-of-growth chart. Three students, in particular, stand out as exceptional cases of what is for others on the chart a consistent trend. Students four, seventeen and twenty are anomalies. Student four, for example, scored 2.8 on a 4 point scale used for the EQAO grade six assessment of reading. This student therefore out performed expectations on the BRI achieving a grade ten

instructional level. Student seventeen, on the other hand, performed poorly on the BRI with an instructional level of grade seven especially given the fact that the student scored 3.1 on the 4 point scale used for the EQAO grade six assessment of reading. Student twenty by contrast scored instructional grade 9/10 on the BRI with an achievement performance of 2.2 on the EQAO grade six assessment of reading.

Figure 1.4



An intensive after-school reading program was initiated in conjunction with Durham Continuing Education to provide remediation for at-risk students. This involved communicating with the parents/guardians of each student by letter and phone call to inform them of the opportunity and to encourage the participation of their child.

Twenty-one of the 45 students under consideration registered for the program. Nineteen students participated. The program consisted of nine after-school sessions lasting one hour in length beginning in mid-November and lasting until mid-January. It was taught by an English teacher. The program was based on the theory and practice outlined in the book *I Read It, But I Don't Get It: Comprehension Strategies for Adolescent Readers* (2000) by Cris Tovani.

An example taken from the Tovani book of an activity that demonstrated the importance of teaching students how to set a purpose for reading was called "The House." Students were first asked to read an article with no direction on purpose for reading. Then students were asked to read the article again and to use a highlighter to mark places in the text a thief would find important. Students noticed that having a purpose made it much easier to highlight important points. Then students read the

article a second time but using a different coloured highlighter to mark places in the text that a prospective homebuyer might think is important. Again it became obvious how much easier it was to determine what is important when the reader has a purpose.

“Once students see the importance of establishing a purpose when they read, it’s time to teach them different purposes for reading.”

Cris Tovani, page 26

Students concentrated on the types of reading selections included on the OSSLT. Practice reading information paragraphs, news reports, dialogue, real-life narrative and graphic selections occurred.

RESEARCH FOR ACTION: PLC



Concurrently, a series of literacy lunches from November 2008 to May 2009 were

coordinated and offered to teachers of grade ten courses. Fourteen teachers representing seven departments in the school participated in a series of six literacy lunches. Each teacher was given a copy of the Cris Tovani text, which became the shared reading. Additional reference texts were provided based upon teacher interest. These texts included *Yellow Brick Roads* (2000) by Janet Allen, *When Kids Can't Read What Teachers Can Do* (2003) by Kylee Beers, *Q Tasks: How to empower students to ask questions and care about answers* (2006) by Carol Koechlin and Sandi Zwaan, and *Teaching Fairly in an Unfair World* (2008) by Kathleen Gould Lundy, *Even Hockey Players Read: Boys, Literacy and Learning* (2002) and *It's Critical! Classroom strategies for promoting critical and creative comprehension* (2008) by David Booth. These commercially available texts represented the professional knowledge base in terms of a literature review in the area selected as the focus for the action research project.

All literacy lunches were facilitated by D.D.S.B. Literacy Coach Nicole Dolabaille. In the first session the Literacy Coach engaged the teachers in an activity in support of strategic reading taken from the Tovani book. The activity was called "what do you wonder?" The intent was to learn about what knowledge the teachers already had about teaching reading and where they needed to go in their professional development.

"A strategy is an intentional plan that readers use to help themselves make sense of their reading. Strategies are flexible and can be adapted to meet the demands of the reading task. Good readers use lots of strategies to help themselves make sense of text."

Cris Tovani, page 5

The strategy of the "Entry Ticket" was used to ascertain what questions teachers had about teaching reading. The following questions were generated:

1. How do we get students to answer the question that is being asked?
2. How do we make vocabulary building easier?
3. How can we make reading resources more enticing?
4. How can I better teach comprehension / understanding?
5. How do I know that students really understand what they are reading?
6. How can we get students to make connections with the texts, themselves, and the world they live in?
7. How do I facilitate students' understanding of concepts if they have difficulty with specific words?
8. How do I diagnose / identify kids with reading deficiencies in a math class?

9. How can I help someone to read when I have 25 students in a class?
10. What strategies can I use to move students from decoding to fluent reading?
11. How do I determine the correct reading level of a text?
12. How can I get students to read the full question and to understand everything that is required in the question?

The first session concluded with the following definition of text that comes from the English curriculum document: "The word text . . . [is] a means of communication that uses words, graphics, sounds, and/or images to convey information and ideas to an audience."

Reading was defined based upon its definition in *Think Literacy Cross-Curricular Approaches, Grades 7 – 12, 2003*. Reading is defined as the process of understanding print and graphic text; a thinking process that involves decoding and comprehending text. A discussion of the reading process and the difference between word calling and comprehension ensued.

"Word callers have mastered decoding and, as a bonus, also choose to read. However, they don't understand that reading involves thinking."

Cris Tovani, page 15

". . . anyone can struggle given the right text. The struggle isn't the issue; the issue is what the reader does when the text gets tough."

Kylene Beers, page 15

In session two, the Literacy Coach reviewed with participants the process of reading. Strategies used by effective readers fall into the stages of before, during, and after reading. Teachers were introduced to a strategy called "Word Splash". This is a pre-reading activity. It introduces students to vocabulary that will be encountered in a text. The goal is to make connections between words or concepts and to make predictions about the anticipated reading.

Each teacher at the literacy lunch was asked to do some silent reading of a text and to pick key words or concepts pertaining to the content that would need clarification for understanding. Each key word or concept was placed on a "Word Splash" template consisting of blank shapes. It served as a framework to remember and to retell the important details of the information. Thinking was stimulated and connections were made between words and concepts.

A discussion followed about how reading involves fluency and comprehension. A brief overview was provided of the four cueing systems, and of the strategies used by efficient and effective readers.

In the third session, the question examined was “how can we make reading resources more enticing?” Two strategies called “The Tea Party” and “The House” were demonstrated.

The first strategy involved being given statements from an anticipated text. It is a pre-reading activity. Participants were asked to mix and mingle sharing their statements. Thinking was stimulated in terms of making connections and predictions about the meaning of the text.

The second strategy involved reading a short article and highlighting key words or phrases that represented for the reader important facts for recall and understanding. Participants soon realized that further direction would be needed by a teacher to clarify for students what information is most important for understanding. Cueing students before reading is a critical step in the teaching reading process. Content area teachers often overlook this critical step.

This experience provided pivotal insight into how to support strategic reading. A discussion about the importance of setting a purpose for reading ensued.

Session four continued with the question “how can we make reading resources more enticing?” As well, participants explored the question “how do I know that students really understand what they are reading?” Teachers were involved in a before-reading strategy known as “Book Pass” which came from Janet Allen’s book *Yellow Brick Roads*. The activity “How to Host a Book Pass” showed participants different ways of introducing students to a variety of texts in the classroom. Also students learn how to choose appropriate text for their interests and reading ability. This strategy can also help to increase reading speed.

The fifth session continued with the question “how do I know that students really understand what they are reading?” Participants viewed from Tovani’s video “Thoughtful Reading” a short section called “Strategy Instruction: Whole Class, Short Text.” Participants were asked to view the video looking for how students were prepared for reading, how they were given choice, and how they made their thinking visible. Discussion of Tovani’s strategies followed.

“Good readers engage in mental processes before, during, and after they read in order to comprehend text.”

Cris Tovani, page 27

CLASSROOM MODELLING: FOCUSING ON ACTION

Visualizing success in teaching reading skills within the content-area teaching and learning process, two classroom teachers volunteered to partner with the Literacy Coach to design a lesson that integrated best practices in teaching reading skills. Both teachers taught Science. Both teachers were interested in the use of process targets for reading expectations in their courses. The learners in their classrooms were a typical group of Applied and Academic program level students. The Applied class included a cluster of special needs students. A synopsis of the lesson designs follow.

A lesson was developed for grade nine Academic Science. The subject area content was asexual reproduction and fungi. Curriculum expectations included describing cell theory, and applying it to processes of cell division, including mitosis, and the function of sexual and asexual reproductive systems. Students had prior knowledge about cell division (mitosis). The learning goal for students was to understand how bacteria spread. Resources developed to assist with the teaching and learning process included an Anticipation Guide handout, and a Guiding Question sheet. These resources were adapted from *Think Literacy: Cross Curricular Approaches, Grades 7-10, pages 20 – 23* and Kyleene Beers' *When Kids Can't Read: What Teachers Can Do*, pages 74 – 80.

The Anticipation Guide required students to contemplate facts about fungi and to answer yes or no to statements. This pre-reading activity provided a mental set for new input from the textbook reading.

Next the Literacy Coach discussed the purpose for reading and how it directs what information to focus upon and what to ignore. Students were then arranged into groups with each group being given a specific purpose for reading. Students participated in a scavenger hunt activity using the textbook to locate information that specifically answered the assigned question. As a group, students summarized the relevant information recording it on chart paper. Notes could include a combination of images and point form notes. When done, students passed the chart paper onto another group. This process continued until the groups had answered all questions.

The chart paper was posted on the classroom walls. At this point, the teacher highlighted the most important information that students needed to know. Students then created their own notes from the chart paper.

Following the note taking process, students revisited the Anticipation Guide. Students were instructed to reconsider the fact statements based upon any new information from the reading. Students assessed whether their beliefs had changed. Students then recorded information that supported any new opinions.

“There’s no such thing as the perfect lesson, the perfect day in school or the perfect teacher. For teachers and students alike, the goal is not perfection but persistence in the pursuit of understanding things.”

Carol Ann Tomlinson & Jay McTighe



Another 75 minute lesson was developed for a grade ten Applied Science class that included a clustered group of special needs students. The subject area content was the organization of the periodic table. Curriculum expectations met for the development of inquiry and communication skills were the analysis of data and information to clarify aspects of the question chosen and to communicate the results of the investigation using a variety of formats. Specifically students were to demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analyzing and interpreting, and communicating). Students were to demonstrate an understanding of simple chemical reactions and the language and ways to represent them.

The learning goal for the students was to discover three major trends of the structured arrangement of elements in the periodic table that would help students to explain and predict the physical and chemical properties of elements. Resources developed to assist with the teaching and learning process were sets of sorting cards for scientific terms (vocabulary review), periods and families of the periodic table, and Bohr-Rutherford diagrams for selected elements on the periodic table.

The lesson began with the teacher using linear questioning and showing overhead diagrams of the atom and the periodic table to review the parts of the atom, the

charges of the subatomic particles, how to determine the number of protons, neutrons, and electrons for a representative element, and defining the terms atomic number and atomic mass. To assess the students' understanding of the basic atomic terms and structures, students were organized into heterogeneous groups of three and asked to collaboratively sort terminology cards and to form a simple concept map to show connections between the terms. Each group was provided with an envelope containing five terms, five definitions, and post-it notes. The definitions and terms were on different coloured paper. Students were asked to match the correct term with the definition. Small group discussion ensued in which students made connections between terms. Students then were asked individually to explain the relationships and structure of their concept maps. This activity proved very effective in quickly determining individual conceptual understanding.

Next, the teacher used direct instruction to explain that each group would continue to work together to discover major trends in the organization of the periodic table. They would participate in three card sorting activities.

Each student was given a set of instructions and questions for the "colour cards" activity. The Literacy Coach reviewed the instructions and checked for understanding of the terms "trend," "characteristic," "horizontal," "vertical," "groups," and "rows." Groups collaboratively sorted, constructed and analyzed the coloured cards. They determined the number of horizontal rows or periods; the number of vertical columns called groups or families; and discovered what each family had in common. Each student recorded written answers. The teacher facilitated a brief follow-up class discussion for groups to share their discoveries.

For the next "coloured shapes" sorting activity, each student received a set of instructions and questions. The Literacy Coach clarified the words period, group and gradual change and listed the symbols for Roman Numerals one to eight. Each group collaboratively sorted, constructed and analyzed the coloured shapes. They determined the number of periods, what each period had in common, two trends across the period, the number of families, what each family had in common, and the trend down a family. Each student recorded written answers. The teacher facilitated a brief follow-up class discussion to formalize their discoveries and trends.

For the last sorting activity, each student received a set of instructions and questions. The Literacy Coach checked for understanding. Each group collaboratively sorted, constructed and analyzed the Bohr-Rutherford diagrams. They determined the number of periods, what members of the same period had in common, the number of families, what each family had in common, and then predicted which family given elements would be placed and why. The teacher facilitated a brief follow-up discussion to share and reinforce their discoveries.

The class ended with the distribution of homework worksheets to reinforce the concepts learned in the lesson. This series of collaborative hands-on activities proved very effective in actively engaging all students in discovering trends through inquiry and critical analysis. Their discovery was achieved by way of a creative and enjoyable

pedagogy.

Results and Findings:

Investigating how to produce higher success rates on the OSSLT was the catalyst for the action research project. As the project evolved, however, the achievement / performance target gave way as the focus. Rather it became clear that process targets became the focus as a means to an end.

Sagor (2005) defines *process targets* as “techniques or strategies that we want to be part of our teaching repertoire” (pg. 17). Process targets, therefore, focus on specific improvements that teachers want to see in themselves. In this regard, improving teaching skills in the key area of teaching reading skills is a key insight gained from the series of literacy lunches. Specific changes in teaching behaviour need to occur for content-area teachers to build the capacity of struggling readers to understand implicitly stated ideas and information in a variety of texts.

Qualitative data was gathered at a Literacy Lunch in mid-May. Participants were asked the open-ended question, what insights about teaching reading skills have you acquired as a result of this action research project? The following insights were stated:

1. Kids can read and write without processing/thinking, i.e. word callers. They employ “no comprehension strategies” to comply with the teacher but a check for understanding reveals that no processing has occurred in the students’ minds.
2. The importance of using mind maps or concept maps for students to show post-reading knowledge/comprehension.
3. The overall importance of using visual images as an aid for understanding text.
4. The importance of informal talk about ideas in text.
5. The importance of setting a purpose for reading. Even good readers struggle under pressure and revert to a desperate and confused decoding of text without a purpose for reading.
6. Our process has failed the user test. We need to teach students methodical reading skills. We are asking students a step four stage, when we haven’t led them through steps 1 – 3, i.e. setting a purpose for reading. We need to scaffold/ guide students. Even on a test, we need to re-stage test questions that involve reading with the expected thought process.

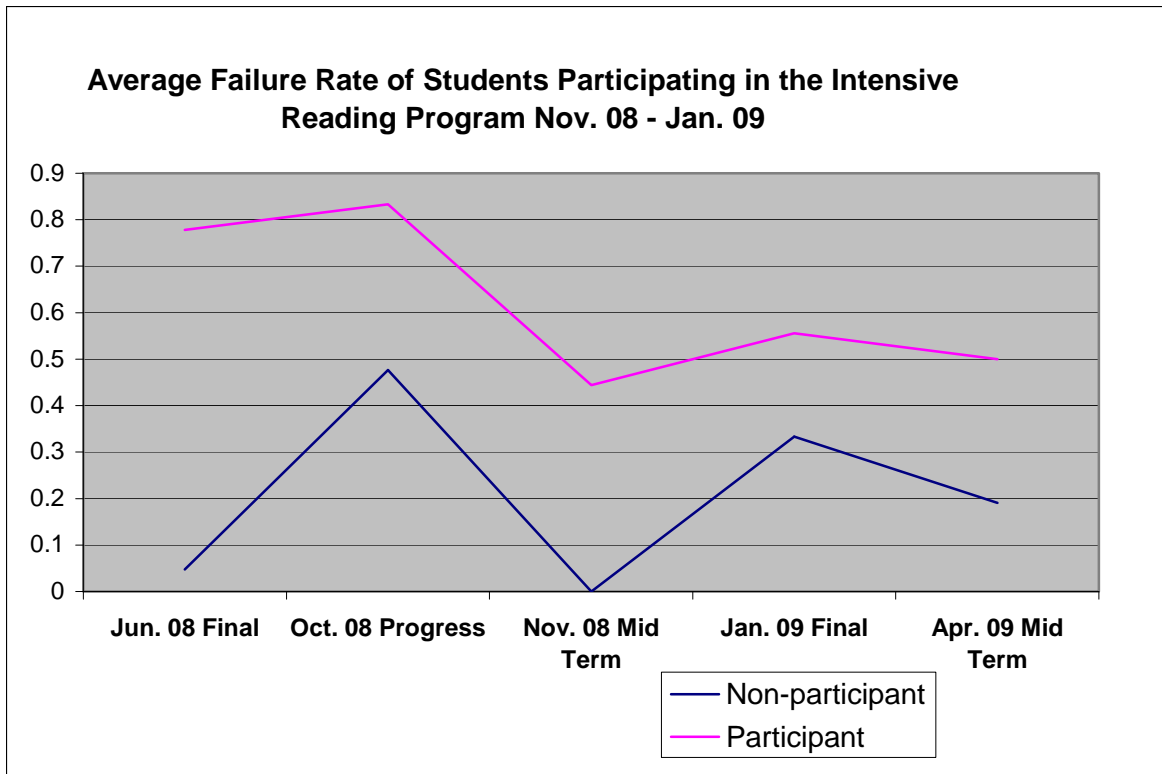
The two classroom models of teaching reading skills within the content-area of Science demonstrated how effective teaching might appear if the processes of pre-reading, during reading, and post-reading strategies were embedded within a teacher’s pedagogy. If these strategies were regularly taking place, the impact on student learning would be significant. Process targets include changes we would like to see in

our teaching skills and methods whenever text is involved in instruction. Integrating the new insights about the complexity of reading into prevailing routines in the classroom is a long-term goal for school programming. Continuing to build the capacity of the teachers who participated in the research project by encouraging them to inform their own teaching practice with high yield reading strategies is still a work in progress.

This project supports and reinforces many of the steps toward universal literacy success outlined by literacy expert David Booth (2007). The steps include the following:

1. Ensuring that students read for meaning and find significance in their reading in every curriculum area.
2. Modeling and demonstrating literacy strategies to support and encourage developing readers.
3. Encouraging students to talk with others about what they are reading in order to build background and expand comprehension.
4. Guiding students to reread and to respond in ways that are meaningful to them.
5. Incorporating graphic organizers to help students to interact with their reading, and record and organize their thinking about texts.
6. Leading students to a better understanding of how different text forms work, the characteristics, qualities, and vocabulary that are specific to each type of text they will meet.
7. Helping students to see themselves as successful readers, growing in confidence and competence, and setting goals to increase literacy achievement.

Comparison data between the average failure rate of students participating in the intensive after-school reading program versus non-participants who were part of the cohort of 45 at-risk students reveals an interesting trend. Figure 1.5 indicates that participants in the program had a much higher average failure rate by the end of grade nine in June 2008. At the onset of the after-school program in October 2008 again the data indicates that participants, now in grade ten, had a much higher average rate of failure according to early progress reports in October of first semester. By the mid-term report in November 2008, both groups of students had improved their grades considerably. The gap between the two groups remains close from then on throughout the end of first semester. It remains close until the most recent mid-term second semester reports in April 2009. This suggests improved academic performance on the part of students who participated in the after-school program.



We are anticipating the achievement / performance results on the OSSLT 2009 for the students who participated in the after-school intensive reading program. Their performance/achievement on the OSSLT 2009 is the dependent variable. If the students who participated in the after-school intensive reading program are successful on the OSSLT 2009, then there is clear and unambiguous evidence that the program produced improvements with our priority achievement/performance targets. Improved inferential reading comprehension skills could be surmised from success on the OSSLT. The sum of performance on the subelements of the test, which include assessment of three reading skills and two writing skills, infers success on the achievement target of inferential reading.

Reflections and Action:

The efficacy and impact of the after-school intensive reading program was demonstrated by this quasi-experimental research. The program was helpful in teaching struggling readers strategies for understanding text. Observation on the day of the OSSLT 2009 revealed students who had participated in the program applying strategies learned and practiced in the program, i.e. underlining text using a highlighter.

A critical independent variable was the rate of attendance by individual students in the after-school program. Seven of the twenty-one students attended all nine sessions reflecting perfect attendance. All seven were boys. Two other students, both girls,

attended eight of the nine sessions. While awaiting results from the OSSLT 2009, we are asking ourselves the question: What is the relative importance of this identified key independent variable? Given the established relationship between time on task and learning, we anticipate better performance results for those students with perfect or near perfect attendance in the after-school program. We are also reflecting upon the question: what are the issues, factors, programs and processes that must be addressed to achieve greater attendance by other students in the program? How could our theory of action be modified to make universal success in terms of participation rates in the intensive reading program more likely?

OSSLT, April 2009 school results indicate that 87% of FTE students were successful. Results for the sub-group of forty-five students deemed at-risk of failure indicate that nine of the original forty-five students were unsuccessful on the 2009 administration of the OSSLT. This reflects a 20% failure rate which is considerably higher than the overall results for fully participating students. It validates and confirms teachers' concerns almost one year ago that these students were at-risk of failure. A corollary to this finding, however, is the acknowledgement that eleven students who were unsuccessful on the OSSLT, April 2009 were not referred by teachers in the screening process.

On a positive note, however, among the twenty-one students who registered for the intensive after-school reading program sixteen were successful on the OSSLT, April 2009. This represents a 76% success rate. When attendance rates are taken into account, only one in five students had good attendance in the after-school reading program. Thus, a direct correlation exists between attendance and achievement. Four of the five failures from the cohort of twenty-one students were boys. This fact confirms the extensive research and knowledge base regarding boys and literacy.

Conducting an exit assessment using the BRI with each student who participated in the after-school reading program is an idea for a next step. This would allow us to determine the rate of progress for each student during the current school year.

The classroom modeling of teaching reading skills called attention to the need to change secondary school teaching practice so that all content-area teachers become reading teachers. The vision is a focus on a program target in which all of the attributes of a truly outstanding reading program are embedded in the teaching and learning process in all classrooms across the school. Maximally supporting the development of reading skills across the curriculum is the vision. This requires changing our approach to daily instruction where reading is concerned.

In particular, the Applied level of programming is a program target. Given that 81% of unsuccessful students on the OSSLT, April 2009 were taking Applied level courses, this is a priority target. Of course, the Essential level program is also a priority even though it accounts for only 6.3% of student level programming for unsuccessful students on the OSSLT, April 2009.

To this end, the first system-wide professional development day in September 2009 will

see a focus on literacy across the curriculum in relation to assessment for learning. David Booth, Professor Emeritus in the Department of Curriculum, Teaching and Learning at OISE University of Toronto as well as Research Chair in Literacy at Nipissing University will be a guest speaker for the Anderson CVI faculty during the school-based collaborative learning session.

Improving the inferential reading comprehension skills of reluctant/struggling readers in grades nine and ten is no simple or easy goal. Closing the achievement gap between expected independent reading level and a student's actual reading proficiency cannot be done with a brief, even though intensive, remediation program. Student learning in the skill of reading comprehension will require a change in teacher practice within the school. All teachers must consciously and intentionally incorporate process targets for reading into their pedagogy. Clarity on methods of integrating pre-reading, during reading, and post-reading strategies into content-area learning is required. In this regard, all teachers are cast into the role of learners.

Contributions to MISA Professional Network Centre:

This research has contributed to the knowledge and understanding of the MISA Professional Network Centre in several ways.

Sagor uses the phrase "the ethic of action research" to refer to "the norms of collaboration and experimentation" that can produce improvements in academic performance (2005, pg. 168). The PLC described in this research is a good example of the norms of collaboration and experimentation at work in the service of process and achievement targets. It has fostered professional development this school year among a group of teachers from various departments in the school, and has been a catalyst for a school-wide professional development focus on literacy in September 2009.

In the 2007- 2008 school year, the disciplined use of data identified the reading skill of making inferences as an area of need among students who had been unsuccessful on the OSSLT. This past fall the MISA data warehouse was used to collect data to inform decisions. A community of learners was then created to explore the essential question posed by this research. The use of the lunch hour to structure discussions between classroom teachers from different departments in the school demonstrated that colleagues are interested and excited to talk about the teaching and learning process and to learn from each other. The "power of the process," as Sagor suggests, was evident when two Science teachers volunteered to collaborate with a literacy coach to focus on research in action in their classrooms (pg. 169).

Suggestions for Future Research:

Going wider with the discussion by involving all members of the teaching faculty in the school is a goal for research for action in the future. The core capacity of using evidence-informed decision-making to improve student achievement is getting stronger and leading to strategies for improving student achievement.