

Lakeshore Discovery School

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Abstract:

Digital readers (for example, the Kindle from Amazon) are a tool for literacy instruction in the classroom. Digital readers make books more accessible to all students and allow for better understanding of the text through the use of the text to speech feature and the built-in dictionary. Using digital readers in literature circles, during independent reading and for class novel studies will improve student engagement and achievement.

Inquiry Question: How will digital readers enrich the Grade 5 reading program to impact overall student learning about and development in reading?

Setting the Stage

Vision:

“Tomorrow’s citizens face greater reading demands than ever before.” (Tovani, 2000, p.10). By using one of this generation’s familiar tools -- the digital reader -- we hope to reach even the most reluctant readers. “All students are more likely to be engaged in the learning, rise to the challenge and have a sense of self confidence as they approach the task if they feel that they have a chance to succeed” (Gregory & Chapman, 2002, p.5). Due to the interactive and familiar nature of the device, we believe that student success and engagement will increase. As a result, we believe that more students will achieve higher levels of comprehension and demonstrate better decoding skills on a consistent basis.

Theory of Action:

If we use digital readers during literature circles and novel studies, students will be able to respond to text on a deeper level. Student responses include answering questions and choosing specific tasks to be completed during each cycle. We hypothesize that student responses will be more complete and insightful with direct evidence. As a result student comprehension of the text will increase.

Purpose for Study:

Students are inundated with a variety of texts in school and in life. “The written word is no longer restricted to paper form. Children of all ages are being bombarded with information from the Internet and other electronic forms of print. The “E” generation needs to comprehend more than ever before.” (Tovani, 2000, p.10). Understanding these texts quickly and completely is a necessary life skill. As teachers, it is important to recognize this reality and to help students develop this capability through as many means as possible including technology.

Therefore, the purpose of this inquiry is to explore the impact of digital readers on achievement and engagement in reading for a class of grade 5 students.

Justification for the Study

With easy access to “bite size” pieces of information delivered instantly, today’s students’ stamina as readers has diminished. Students are increasingly turning from books in printed form for entertainment or information to electronic sources. This is a 21st century reality. The Ontario School Library Association recognizes that school environments and students abilities are changing. “Students appear to have natural abilities to use emerging technology. But the reality is, while students easily grasp the entertainment and communication value of the devices they use, they need to be taught how these tools can be used in learning and critical thought.” (OSLA, 2010, p. 7).

This change in habits and abilities appears to have had a profound impact on reading in the classroom. Traditional literature requires more than a cursory glance. It is necessary for a student to be an active participant in the text in order to understand what they are reading and to show their learning in their assignments. Leveraging student familiarity with electronic devices and utilizing them as a way to encourage in-depth reading is a logical strategy. “Adjusting the nature of instruction to include strategies that make learning easier for children is appropriate for all learners. It is essential for those who are experiencing difficulty.” (Strickland, Ganske, & Monroe, 2002, p. 47). The use of technology increases student engagement in many ways. The digital reader will allow students to easily access information that will help them with decoding and understanding words as well as with their comprehension of the text.

For this inquiry, we believe that ease of use and student familiarity with technology is a key factor. The grade 5 students in this study were struggling to achieve in reading. As early as September, a key barrier to success was emerging: students had a highly passive approach to their learning in general and to their language learning most specifically. Although there were anchor charts and other supports in the classroom to help with both decoding and comprehension, students were reluctant to utilize them, preferring instead to ask the teacher for help or, in many cases, to simply sit at their desks unsure of how to proceed. Students appeared either unable or unwilling to implement strategies that would improve the quality of their reading responses. With this in mind, we wanted to see if leveraging students’ predisposition to electronic devices would help. Would the built in functions that a digital reader possessed -- such as the dictionary and the search tools -- be intriguing and convenient enough to overcome student apathy and lead to better quality work?

Existing research seems to support the idea that utilizing electronic devices might have the desired impact. “Most students already have some experience with personal computers and electronic games before they reach the junior grades...The school plays an important role in

providing equitable access to the tools, information and new forms of learning on which students will increasingly rely as they...plan for their future beyond school.” (Literacy for Learning, p.24). Students at Lakeshore Discovery School are no exception. Most, if not all, students have their own iPod Touch, iPad or other similar device.

The school is also fortunate to have many technology options available to students. In addition to digital readers there are approximately 100 laptops, iPads and SMART boards in most classrooms. Teachers utilize technology in their lessons in recognition of the role it plays in students’ lives and of the priority placed on the integration of technology in the classroom found in the research based strategies that are the foundation of our Board Improvement Plan for Student Achievement.

By introducing students to great literature and by allowing students to use digital readers we hoped students would be more motivated to complete their reading and the literacy tasks assigned. “In an age when many teacher-librarians are not sure about the continued relevance of their promotion of reading and love of books, e-books and digital textbooks may represent a fresh way to continue advocacy for the importance of reading ... as well as for the teacher-librarian’s crucial leadership role in technology integration” (Mardis & Everhart, 2011, p.8).

Description of Procedures and Implementation:

Our team designed three separate reading projects for the students in grade 5:

- 1 – Literature Circle (grouped by reading interest/book choice)
- 2 – Literature Circle (grouped by ability and compatibility)
- 3 – Novel Study (Tuck Everlasting)

Approximately half the students used traditional printed texts. The other half of the students used digital readers. All completed the same type of work.

1 – Literature Circle 1 (see appendix for complete documents)

- a) Students were presented many novels from which to choose. We grouped students based on their selections.
- b) We designed learning goals and success criteria for each cycle that progressively built on reading skills (summarizing, inferring, point of view).
- c) We created rubrics to match the learning goals and success criteria, and to guide student work.
- d) We designed differentiated tasks for each of the learning goals and success criteria.
- e) We introduced the tasks with examples/exemplars for each.
- f) We also assigned students to ask a thinking question using the Q-chart and answer it using the AEO (Answer, Evidence, Own Ideas) strategy. Students have had a lot of practice answering questions using the AEO format.
- g) Students were also introduced to conferencing. We modelled a conference before students were asked to participate in one. We also set up expectations for

conferencing. At the end of each cycle, literature circle groups met with a teacher (facilitator) and discussed their novel using their Q-chart question as a conversation starter.

- h) Student groups were assigned print copies or digital readers based on the text they had chosen as only some novels were available to the class in digital form. Students had no knowledge of which texts were in which form prior to making their selections.

2 – Literature Circle 2 (see appendix for complete documents)

- a) Students were assigned groups based on ability and compatibility. Each group was then asked to choose a book from a list provided. We included the use of audio books for some of our groups. Again, students were not aware if a book was available on the Kindle.
- b) All expectations were the same (Q-chart question and AEO response, one task from a list, participation in a conference). Students could not choose the same task as in the first literature circle.
- c) Print based books and digital readers were assigned the same fashion as above.

3 – Novel Study (see appendix for complete documents)

- a) We designed learning goals and success criteria for each of the 5 tasks for the 5 cycles.
- b) Students were put in 2 groups (strong and struggling). The struggling students were assigned digital readers for the first half of the book and the stronger students were given traditional books. Our rationale for this was to ensure that practice with completing similar tasks would not impact our results. Half way through, these groups switched (digital readers traded for traditional books).
- c) The teacher read each chapter and a class discussion followed focusing on key concepts and events after each chapter. Students were also asked to complete a short summary on a timeline, including a picture and words, to refer back to during the rest of the novel study.
- d) Students were given 2 short assignments after each cycle ~ ask and answer higher-level thinking questions using the Q-Chart and a task assigned by the teacher. Each task required students to look back in the novel for evidence so this may have been quicker for those using digital readers.

Findings

After the 2011-2012 period of inquiry, analysis of the quantitative data shows that grades increased somewhat for students who used the digital readers as compared to students who read the printed literature. In particular, struggling students (level 1 & 2 students) were able to benefit most significantly, receiving a full grade level higher on multiple assignments.

Qualitative data is discussed in the section on student and teacher reflections.

Literature Circle - Reading Response (AEO) Grades

	Kindle				Total	NO Kindle				Total	Increase -> Kindle vs. Book
	Cycle 1	Cycle 2	Cycle 3	Cycle 4		Cycle 1	Cycle 2	Cycle 3	Cycle 4		
Marker Student 1	2	2	3	3	10	R	R	2	2	4	6
Marker Student 2	2	2	3	3	10	1	2	3	2	8	2
Marker Student 3	2	3	2	2	9	R	1	0	2	3	6
Marker Student 4	2	1	1	1	5	1	0	1	1	3	2
Marker Student 5	2	1	1	3	7	R	1	2	1	4	3
Marker Student 6	2	2	2	3	9	2	3	2	1	8	1

These results were not as definitive as those seen during the previous school year. Similar action research was conducted during the 2010-2011 school year with a grade 5 class (Mr. Stanley as teacher). However, the composition of this class was significantly different. While students began the year at a higher level academically, there were overall issues with behaviour that often interfered with learning. The digital reader appeared to focus these students with behaviour issues (many of whom were boys). Perceptual data indicated that the built-in tools appealed greatly to these students, helping them to focus, to complete their work and understand what they were reading much faster. Student performance showed a full grade level improvement overall more for the digital reader group as opposed to the traditional paper based book readers.

Teacher Reflections:

When planning and developing our literature circle projects, a number of factors influenced change. First, a number of students were unable to keep up with their reading during the first round and so the grades do not accurately reflect their understanding and interpretation of the books they read. Second, the motivation of a number of students to complete work on time and to submit their best work was a factor. In response to this, our research team decided to introduce audio books so that a fairly large group of students (13 out of 24 total in the class) could complete their reading and have time to complete assigned tasks. Because of this, not all students were able to use a Kindle for one round and a paper book for another.

We have chosen to look at the results of some marker students who used both a Kindle and a traditional book. We chose to look at the results of 6 students in particular during the literature circle portion of our study. The students chosen used a Kindle once and read a traditional book once. Each student has shown a number of areas of need throughout the year as well. For each student, grades were higher when using a Kindle. For 5 of the 6 students, grades went up at least one grade level for at least 2 assignments.

For example, for the first literature circle with a book one student achieved levels R, R, 2 and 2 on AEO responses yet with the Kindle, this same student achieved levels 2, 2, 3 and 3 for her AEO responses. Another example of improvement happened with the AEO responses during the novel study. Several students improved the quality of their responses with the use

of the Kindles. Specifically, one struggling student went up a full level on both AEO responses with the assistance of a Kindle.

During independent work time when students need to refer back in a book for evidence or other required details, students are much more efficient and positive when using a Kindle. They are able to use the search function to quickly find what they are looking for and more, and so are able to complete their work in a shorter amount of time and include more valid details. The students who were using a traditional book often complained about how long it was taking to find what they were looking for. They also frequently asked to use a Kindle to make the work easier.

Student Reflections:

Based on the information we collected from students through the use of a post-survey, students had mostly positive things to say about their experience using the Kindles. Only 17% of the students had their own eReaders at the beginning of our project but by the end 65% had either an eReader or an eReader app on another device.

Students seemed most impressed with the functions available on the Kindle. We noted that they liked the search function and the dictionary function. They also liked using the buttons and keyboard. They did, however, struggle with finding their spot at times. Students also wished for colour and touch screens, both of which are available in a newer (and more expensive) version of the Kindle or other eReaders.

Interestingly, 56.5% of students would prefer to use a traditional book for future novel studies or literature circles. After reading all of the positive things students had to say about using the Kindles, it is hard to interpret why more preferred to use a traditional book over an eReader in the future.

Conclusions and Future Directions:

While using digital readers in the classroom has many compelling benefits, it is not a panacea. As with all technology in the classroom, there are pros and cons: though many students are savvy users of technology at home, they may not take advantage of the features available for academic benefit without the intrinsic motivation to succeed. This was often the case in our study. A handful of students in the class were already strong readers and were very comfortable with the traditional paper book. A larger segment of the class was made up of struggling readers. Only a handful of this group was motivated to use the digital reader truly as an assistive device and saw an increase in their grades. The remainder of this struggling reader group seemed to continue on status quo, not too concerned with improving their performance, but rather more concerned with completing their assignments as quickly as possible.

Our research team sees a number of additional uses for the digital readers and digital reader technology at Lakeshore Discovery.

- assistive technology for students with IEPs
- small group guided reading
- student use in library at recess
- after-school reading clubs
- iPad app (same books available for download as on Kindle)
- PC app (same books available for download, books can be projected on projector)

References

Mardis, M., and Everhart, N. (February, 2011). Digital textbooks in Florida: Extending the teacher-librarians' reach. *Teacher Librarian* 38:3, 8-11.

OSLA (2010). *Together for Learning: School Libraries and the Emergence of the Learning Commons*. Toronto, ON: The Ontario Library Association.

Ontario Ministry of Education (2006). *A Guide to Effective Literacy Instruction, Grades 4 to 6*. Toronto, ON.

Blackline Masters

Task #1

Due Date: Monday, January 30

<p>Post Card</p> <ul style="list-style-type: none"> Choose a character from the novel Your character will send a postcard to another character from the book. Be sure to include a picture that represents the setting on one side Be sure to include something about a main event in your message Be sure to address the postcard 	<p>Book Cover</p> <ul style="list-style-type: none"> Create a new, full colour cover for your novel Include the title, author's name and illustrator's name (you) Be sure the illustration shows an important event from the story Write a summary of the book (without giving away the ending) for the back of the cover
<p>Timeline</p> <ul style="list-style-type: none"> Create a timeline of important events from your novel The events should be listed in the order they happen in the book Be sure to include a brief description for each event (1-2 sentences) Choose an interesting way to present your timeline (for example: staircase, road, river). Try to relate it to your novel. 	<p>Email a friend</p> <ul style="list-style-type: none"> Write an email dialogue between you and a friend about the book you are reading You will write an email to tell your friend about the book Then write a response from your friend asking a few questions Finally you will write an email back answering your friend's questions Be sure to use proper English (no slang)
<p>Newspaper Article</p> <ul style="list-style-type: none"> Write a newspaper article that includes an interview with the author Be creative and choose a topic to conduct your pretend interview about Remember a newspaper article gives the important information at the beginning and details later 	<p>Learning Goal: We will demonstrate our understanding of texts we read by completing a piece of writing.</p>

Literature Circle Rubric – Cycle 1 Task

Criteria	Level 1 (Rarely)	Level 2 (Sometimes)	Level 3 (Often)	Level 4 (Always)
Summarize Important Points (1.4 Reading) • Retell important events from the story.				
Include Supporting Evidence (1.4 Reading) • Use details from the story to support writing.				
Organizing Ideas and Form (1.5, 2.1 Writing) • Organize main ideas and supporting details appropriately for your chosen task.				
Conventions (Writing) • Use correct spelling, use appropriate punctuation, and use proper grammar.				

Task #2

Due Date: Tuesday, February 7th

<p>Totem Pole</p> <ul style="list-style-type: none"> Design a totem pole for one of the main characters in your story. Choose 5 or 6 objects that are important to this character. Draw your totem pole with the objects stacked on one another and write the description beside each object. Use the worksheet for planning 	<p>Diary</p> <ul style="list-style-type: none"> You will write 3 journal entries from the perspective of a character you choose in your book. Each entry should be half of a page (slipping lines). Be sure to express your feelings, record events and memories, share your secrets, and reflect on lessons you have learned as the character.
<p>Time Capsule</p> <ul style="list-style-type: none"> Think of objects that a character in your book would want to put in a time capsule. List the objects along with a description of why you chose them. Collect the objects (or draw them) and put them in a time capsule that you create. Use the worksheet for planning 	<p>3 Wishes</p> <ul style="list-style-type: none"> Think about what 3 wishes a character of your choice would ask for. Write them down on the worksheet. Choose the most important wish and complete the task on the worksheet.
<p>Character Sketch</p> <ul style="list-style-type: none"> Complete a character sketch like the ones we did in class. Include physical characteristics and character traits Support your inferences and observations with evidence from the text (page/location number or a quote). 	<p>Learning Goal: We will infer to complete a piece of writing about a character.</p>

Literature Circle Rubric – Cycle 2 Task

Criteria	Level 1 (Rarely)	Level 2 (Sometimes)	Level 3 (Often)	Level 4 (Always)
Making Inferences (1.3 Reading) • Make inferences about important events/characters in the story.				
Include Supporting Evidence (1.4 Reading) • Use details from the story to support writing.				
Organizing Ideas and Form (1.5, 2.1 Writing) • Organize main ideas and supporting details appropriately for your chosen task.				
Conventions (Writing) • Use correct spelling, use appropriate punctuation, and use proper grammar.				

Task #3

Due Date: Tuesday, February 21st

<p>Comic Strip</p> <ul style="list-style-type: none"> Create an 8-panel comic strip that changes an important scene in the book you are reading. Make your comic from the point of view of the author. Include expression and body language to help convey feelings. Be neat, add colour, and include a lot of detail. There should be at least 1 word bubble per frame. 	<p>Book Review</p> <ul style="list-style-type: none"> You need to review your book and decide whether you would recommend it to other readers or not. Use the worksheet to guide you in your review.
<p>Journal Entries</p> <ul style="list-style-type: none"> Write 3 or more journal entries from the perspective of one of the main characters in your story. Use these guiding questions to help you: What are some major conflicts, dilemmas, or problems this character faced? What might have to be done to resolve these? What is the character feeling? Be creative by putting yourself in the character's shoes. Each entry should be at least half a page skipping lines. 	<p>Extend the Story</p> <ul style="list-style-type: none"> Choose one important event in your story. Decide whose perspective this event is being told from (the author, one of the characters...). Retell this event from another character's perspective. Should be at least a page skipping lines.
<p>Decisions</p> <ul style="list-style-type: none"> Identify a big decision a character has to make and create a pro and con list using a T-chart. Include at least 5 points on each side of your chart. Explain what decision you think the character should make and explain why. 	<p>Learning Goal: We will identify the point of view to complete a piece of writing from the perspective of a character or the author.</p>

Literature Circle Rubric – Cycle 3 Task

Criteria	Level 1 (Rarely)	Level 2 (Sometimes)	Level 3 (Often)	Level 4 (Always)
<p>Point of View (1.9 Reading)</p> <ul style="list-style-type: none"> Identify points of view and missing or alternate points of view, using descriptive words. 				
<p>Include Supporting Evidence (1.4 Reading)</p> <ul style="list-style-type: none"> Use details from the story to support writing. 				
<p>Organizing Ideas and Form (1.5.2.1 Writing)</p> <ul style="list-style-type: none"> Organize main ideas and supporting details appropriately for your chosen task. 				
<p>Conventions (Writing)</p> <ul style="list-style-type: none"> Use correct spelling, use appropriate punctuation, and use proper grammar. 				

Tuck Everlasting – Cycles

Cycle 1: Prologue & Chapters 1-5

Due Date: _____
At the end of this cycle, you will need to have completed the following:

- One activity assigned by the teacher
- Question (using the Q-Chart) and answer
- A timeline entry for each chapter in this cycle.

All activities must be in your folder in your book box to be marked.

Cycle 2: Chapters 6-10

Due Date: _____
At the end of this cycle, you will need to have completed the following:

- One activity assigned by the teacher
- Question (using the Q-Chart) and answer
- A timeline entry for each chapter in this cycle.

All activities must be in your yellow folder in your book box to be marked.

Cycle 3: Chapters 11-15

Due Date: _____
At the end of this cycle, you will need to have completed the following:

- One activity assigned by the teacher
- Question (using the Q-Chart) and answer
- A timeline entry for each chapter in this cycle.

All activities must be in your yellow folder in your book box to be marked.

Cycle 4: Chapters 16-20

Due Date: _____
At the end of this cycle, you will need to have completed the following:

- One activity assigned by the teacher
- Question (using the Q-Chart) and answer
- A timeline entry for each chapter in this cycle.

All activities must be in your yellow folder in your book box to be marked.

Cycle 5: Chapters 21-25 & Epilogue

Due Date: _____
At the end of this cycle, you will need to have completed the following:

- One activity assigned by the teacher
- Question (using the Q-Chart) and answer
- A timeline entry for each chapter in this cycle.

All activities must be in your yellow folder in your book box to be marked.

Literature Circle Discussion Checklist

Date: _____ **Kinda YES NO**

Book Title: _____	Voluntarily shares question	Summarizes and listens to the ideas of others	Shows willingness to have ideas questioned	Considers feelings and the views of others before reaching conclusions	Questions or supports the ideas of others	Supports and elaborates ideas with facts or details
name						
name						
name						
name						
name						

Novel Study Learning Goals/Success Criteria

Cycle 1 Task

Depict a scene using a quote from the story using coloured pencils/markers or hodge podge. Write your quote and an explanation of the quote in your own words.

Learning Goal:

- based on descriptive language / extraordinary words / vocabulary

Success Criteria

- Explain the quote – Analyse the story and explain how the description of the scene contributes to the story
- Include a quote of a descriptive scene
- Your art should show effort and match your quote.

Cycle 2 Task

Write 10 extraordinary words from the story, write a definition for each, and use the thesaurus to find an appropriate synonym.

Learning Goal:

- based on extraordinary words, searching a text

Success Criteria:

- Find at least 10 extraordinary or robust words
- Define the words using a dictionary, writing the definition in your own words
- Write a synonym for each word using the thesaurus
- The chosen words should relate to or remind someone of the story (ex. changelessness)

Cycle 3 Task

Identify a BIG decision a character needs to make. Create a pro and con list for this decision with at least 5 Pros and 5 Cons.

Learning Goal:

- related to perspective, analyzing the text

Success Criteria

- Identify an important decision related to the plot
- Include detailed pros and cons that relate to your decision
- Include at least 5 pros and 5 cons
- Should be neat and organized

Learning Goal (1.4) – Cycle 1

We will demonstrate our understanding of texts we read by completing a piece of writing.

Success Criteria

- I retell important events from the story
- I include supporting evidence
- I organize my ideas using specific formats
- I use conventions from the editing chart

Anchor Charts needed

- conventions – editing on wall
- examples of writing for language wall

Learning Goal (1.5) – Cycle 2

We will infer to complete a piece of writing about a character.

Success Criteria

- I include strong proof from the text (such as evidence from the text and my experiences) to back up my inferences.
- I use extraordinary or descriptive words to express my inferences.
- I organize my ideas using specific formats
- I use conventions from the editing chart

Learning Goal (1.8, 1.9) – Cycle 3

We will identify the point of view to complete a piece of writing from the perspective of a character or the author.

Success Criteria

- I use extraordinary or descriptive words to show my understanding of a character or the author.
- I include strong proof (such as evidence from the text and my experiences) to back up my ideas about point of view.
- I organize my ideas using specific formats
- I use conventions from the editing chart

Q-Chart

	is	did	can	would	will	might
Who						
What						
Where						
When						
How						
Why						

Literature Circle Rubric (Questions, Answers (AEO), Discussion)

Criteria	Level 1 (Rarely)	Level 2 (Sometimes)	Level 3 (Often)	Level 4 (Always)
Creating Questions • Creates open-ended discussion questions that encourage discussion. • Draw on thoughts, feelings, questions, and concerns to create open-ended questions.				
Responding to Questions (AEO) • A & O - Uses stated and implied ideas, and personal interpretations, of the text to make inferences and construct meaning to answer questions. • E - Explains and supports thought, feelings, and ideas with evidence from the text.				
Group Discussion • Contributes ideas and opinions constructively in conferences. • Listens and responds constructively to others when conferencing.				