

A SCHOOL-WIDE, CROSS-CURRICULAR READING PROGRAM

by

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How does a reading-centered academic program and culture affect achievement throughout content areas? This research question informed the development of the school-wide, cross-curricular reading program outlined in this project. The project compiles strategies, materials, and supports for high school students and content area teachers in a small public charter school. The strategies seek to improve student achievement in reading, writing, and language comprehension. Additionally, the project aims to change the culture of reading, writing, and language comprehension in the school from one where students see reading, writing, and language comprehension as a chore to one where students embrace reading, writing, and language comprehension as a tool for success.

The following sections detail various parts of the project. The project content developed for the project begins in “Materials and Strategies” section.

### **Setting and Participants**

This school-wide, cross-curricular reading and language comprehension program was developed for a small public charter school serving around 100 at-risk high school students. The school is project-based and teacher led. Students show mastery of content by completing projects. Teachers make decisions about how the school is run. Teachers at the school determined that the reading and writing skills of students in the school were deficient and that a school-wide effort was needed to improve this. The school has a single language arts teacher and, depending on specific schedules, students may not have language arts class in which to get help with reading and language comprehension skills. Furthermore, content area teachers at the school did not have the necessary training needed to properly teach reading and language comprehension

skills in their respective classes. The school offers classes in 4-week blocks. Students meet daily for two hours in each class.

**Standards**

This reading program serves as a means to supplement the time students spend in language arts classes mastering reading and language comprehension skills. The applicable standards are all 9<sup>th</sup> and 10<sup>th</sup> grade language and writing standards. However, the overall goal is to see increased success in all content areas resulting from increased reading, writing, and language comprehension skills. A detailed list of these standards and their respective benchmarks can be found at the Minnesota Department of Education website with the following url: <http://education.state.mn.us/MDE/dse/stds/ela/> -

The project aims to expand reading and language comprehension curriculum to content area classes. Specific standards related to reading and writing in history, social studies, science, and technical subjects include:

12. Reading in History/Social Studies	9.12.1.1, 9.12.10.10, 9.12.2.2, 9.12.3.3, 9.12.4.4, 9.12.5.5, 9.12.6.6, 9.12.7.7, 9.12.8.8, 9.12.9.9
13. Reading in Science and Technical Subjects	9.13.1.1, 9.13.10.10, 9.13.2.2, 9.13.3.3, 9.13.4.4, 9.13.5.5, 9.13.6.6, 9.13.7.7, 9.13.8.8, 9.13.9.9
14. Writing in History/Social Studies, Science, and Technical Subjects	9.14.1.1, 9.14.10.10, 9.14.2.2, 9.14.4.4, 9.14.5.5, 9.14.6.6, 9.14.7.7, 9.14.8.8

**Program Design**

The program was designed using the Understanding By Design framework for curriculum design developed by Wiggins, G., & McTighe, J. (2011). A team of teachers identified the need for an intensive focus on improving reading and language

comprehension skills of students. This team chose common strategies focused on reading, writing, and language comprehension skills to be implemented in content area curriculum in a single class. The team reflected on student results throughout the 4-week block class. Based on reflection, the team made changes to the strategies used in the initial block and trained in another teacher to utilize the strategies to another content area class. Though this process has produced a suite of materials and strategies for teaching reading, writing, and language comprehension skills in content area classes, the staff will continue to meet in professional learning communities to assess student results. Thus, adjustments to the materials in this project may occur depending on student needs.

### **Outcomes**

Students will show continual improvement in reading, writing, and language comprehension skills throughout the school year. Language comprehension is assessed with vocabulary assessments in each class. Reading level is assessed and tracked quarterly with one-on-one reading probes with teachers. Writing is assessed using peer critiques and a rubric developed the 6+1 traits writing model from Education Northwest. Student improvement is also measured with standardized tests. All students take state standardized tests measuring proficiency in reading as well as the NWEA test measuring individual growth in reading and language.

### **Materials and Strategies**

Reading, writing, and language comprehension are interconnected and reinforce each other. This school-wide, cross-curricular reading program includes tool and materials that assist content area teachers in teaching and assessing student reading and language comprehension skills. The foundational concept behind the program is to have students

practice reading, writing, and language comprehension skills in all classes with consistent structures and assessments. The goal is to make reading and writing a normalized part of the school experience and not something they only see in a language arts class. Students read in all classes using the same reflection strategies. They write using the same formatting, critiquing, and editing practices. And they continually grow and apply their vocabulary. The following sections detail how students will be practicing reading, writing, and language comprehension skills in content area classes. Some of the content is gathered and altered from various sources. Most was developed by the team developing the project.

- **Language Comprehension**
  - *Vocabulary Formative Assessment Document (page 5)*
    - Assessments focus on 5-10 vocabulary words relevant to specific classes.
    - Students take or add-on to the assessment 2 to 3 times throughout a 4-week block class to track vocabulary comprehension from the beginning to the end of the course.
    - Teachers choose vocabulary words that students will be using in reading and writing activities throughout the course.
- **Reading**
  - Reading Probes:
    - Teachers track student reading quarterly with one-on-one reading probes. Students read a passage and teachers time and track work fluency.
  - Articles:
    - Teachers chose articles weekly for students to read. Subject matter of the articles aligns with the content of the class and the theme of the quarter. As they able, teachers coordinate articles for overlapping themes throughout content areas
    - Students read between 2 and 4 articles throughout a 4-week block class.
  - Strategies for reading articles:
    - *KWL* note taking (**page 9**)
      - Know - Students identify what they know about an article before they read based on the title, pictures, and highlighted text.
      - Want to Know – Students identify what they want to know about the topic as when they read the article.

- Learned – Students reflect with peers on what they read in the article and
- *Page Marking*: Students identify different sections or relevant facts within a text by marking directly on the page. This provides teachers with a visual of how well a student comprehends a text.
- *Small groups*: Teachers and support staff read with students in small groups of 4 to 6 and model reading reflection by asking questions as the group reads the article.
- **Writing**
  - Narrative and Technical papers:
    - Students write narrative and technical papers depending on their classes. Students write at least one paper in each 4-week block class. Papers can have varied requirements (length, content, style, etc.) depending on class. An example of the requirements for a paper for a science class is provided on page 10.
  - Strategies and Materials for Papers:
    - Depending on specific requirements, papers will require at least one critique and edit cycle. Students will assess their own draft, get and give detailed peer feedback, and make edits to their paper using the following materials:
      - Self-Assessment Checklist (**page 11**)
      - Peer critique packet: Narrative (**page 12-15**)
      - Peer critique packet: Technical (**page 16-19**)
  - Rubrics:
    - Papers are assessed with a rubric (**page 20**) altered from the 6+1 traits writing model rubric. The rubric assesses the following categories:
      - Focus on Topic (content)
      - Accuracy of Facts (content)
      - Introduction (organization)
      - Sequencing (organization)
      - Flow and Rhythm (sentence fluency)
      - Word Choice
- **Timelines**: Content area teachers implement language comprehension, reading, and writing activities at various stages throughout a 4-week block course. An example of activities used in a life science course is detailed below.

Week in Block	Reading Program Activities
1	Article #1, Vocab Assessment #1

<b>2</b>	Article #2, Short Writing Assignment
<b>3</b>	Article #3, Vocab Assessment #2, Begin writing assignment with multiple edits
<b>4</b>	Vocab Assessment #3, Finish writing assignment with multiple edits

Different classes may use different combinations of activities in different orders.  
The formatting assessment of the activities is consistent throughout classes.

Vocabulary Formative Assessment Document for a life science class

<b>Word</b>	<b>I've never seen this word</b>	<b>I've seen this word but I do not know what it means</b>	<b>I think it means...</b>	<b>I know this word. It means...</b>	<b>I can use this word in a sentence. My sentence is... (also fill in column 4)</b>
Bacteria					
Virus					
Pathogen					
Eukaryote					
Prokaryote					
Outbreak/Epidemic / Pandemic					
Infection					
Transmission					
Vector					



KWL note taking template:

<b>K</b> (Know)	<b>W</b> (Want to Know)	<b>L</b> (Learned)

## Example of paper writing expectations for a life science class:

### EPIDEMIOLOGY

#### Case Study and Deliverable Instruction and Rubric

You will be investigating two outbreaks or studies of your chosen pathogenic disease.

For each outbreak or study you will be:

- Detailing the nature of your chosen pathogen (symptoms, transmission, incubation time, etc.)
- Finding literature (article) that documents an outbreak or study of a pathogen
- Researching background material (using your literature)
- Collecting and analyzing data
- Defining key variables that affected an outbreak or pathogen including:
  - Environmental factors
  - Political factors
  - Social factors
- Detailing demographics of the area or population affected
- Researching strategies used to control your chosen pathogenic disease

All of this information will be compiled into a 2 page analysis paper for each outbreak. Grading will be according to the 6 + 1 writing rubric and you MUST include at least 4 reliable sources for each paper. The first case study will be provided by Josh after you define the disease that you are researching.

For your second case study, you can either have Josh choose another one for you or you may choose your own.

Finally, you will produce a deliverable that will help prepare the public for a potential outbreak of your disease. This could be an informative presentation that you give at Thursday Spotlight or exhibition day. It could be a website that you develop as a resource for the public to learn more about your disease. It could be an emergency preparedness kit that you assemble and provide instructions for. An informative brochure that you design and print out. It's up to you. The only requirements are that the deliverable must be able to provide the intended audience with the following:

- Information about the nature of the disease (type of pathogen, incubation time, symptoms, treatments, etc.) - 10pts
- Detailed explanation of how it is transmitted - 5pts
- If there is a vaccine, detailed explanation of how it works. Otherwise, detailed explanation of recommended prevention methods - 7pts
- Reference to at least one of the case studies that you researched (Date, place, extent, etc. of outbreak). - 8

Grading:

- Final Case Study Papers - 50 project points
- Final Deliverable - 30 project points
- Deadlines (drafts, revisions, critiques, check-ins, etc.) - 20 project points

**Student Self-Edit Checklist**

Name \_\_\_\_\_ Date \_\_\_\_\_

Assignment \_\_\_\_\_ Title \_\_\_\_\_

4 = Excellent      3 = Meeting Expectations      2 = Developing      1 = Not there yet

**ORGANIZATION**

- \_\_\_\_\_ I have a great title that cleverly relates to my story.
- \_\_\_\_\_ My main idea jumps right out at you from the beginning of my story.
- \_\_\_\_\_ I use an effective beginning strategy. The strategy is \_\_\_\_\_.
- \_\_\_\_\_ The whole thing is organized to help you go from point to point without *ever* feeling lost.  
My story is told in a good order.
- \_\_\_\_\_ Every statement I make relates in some way to my main point.
- \_\_\_\_\_ My conclusion reinforces and supports my main point. My story has a good ending.

**IDEAS AND CONTENT**

- \_\_\_\_\_ My paper is clear, focused and purposeful. You can identify and understand my message.
- \_\_\_\_\_ I have plenty of information from experience and/or research. I have included sufficient details in my story.
- \_\_\_\_\_ I chose information I knew would answer readers' questions.
- \_\_\_\_\_ I use evidence and examples to support every single point I make. There are NO gaps.

**VOICE**

- \_\_\_\_\_ I have energy, enthusiasm, and the confidence that comes from knowing a topic well.
- \_\_\_\_\_ You can tell I like this topic and this story sounds like me. I can identify my favorite part.
- \_\_\_\_\_ You'll want to know more about this topic, too, once you read my paper.
- \_\_\_\_\_ I thought of my audience the whole time I was writing. I tried to answer their questions.
- \_\_\_\_\_ My voice is strong, but under control. My voice is not too funny or sarcastic, *etc.*

**WORD CHOICE**

- \_\_\_\_\_ I have used words that I love and I can identify my favorite word.
- \_\_\_\_\_ I avoid vague language: *stuff that's like, you know, too vague and stuff.*
- \_\_\_\_\_ The words I chose are right for my audience whether they are first graders or scientists.

Your Name (Peer Editor): \_\_\_\_\_

Author's Name: \_\_\_\_\_

### **Narrative Essay Peer Editing Checklist**

*\*\*Note: Editing a writer's work is a time consuming but important job. Please take your time with each of the following steps. Do not take shortcuts. We each are only able to become stronger writers if we are given critical but kind feedback from others. There are many areas on this checklist which require you to think critically about the writer's work and write responses both on the writer's paper and on this worksheet. Be sure to complete all parts. Please return this worksheet to the writer. The writer of the essay will turn this in with his/her/their final draft.*

1. Read the paper with the author and mark with editing codes.
  - a. As you are reading, make any spelling / grammar changes that you find. Be sure to explain to the author why you are changing items.
  - b. Pay special attention to dialogue
    - i. Each time a new person speaks, the new speaker's words should be indented on a new line
    - ii. The punctuation mark should be INSIDE the quotation mark.
  - c. Does your author use dialogue with intention?
  - d. Explain at least two grammatical errors in the space below.
    - 1)
  
  
    - 2)
  
2. Examine the hook and introduction of the essay. How clever and enticing is the hook?
  - a. Does the author create a picture in your mind with his/her/their words?

YES / Needs to improve

- b. Make a suggestion as to how the author can make the introduction EVEN BETTER. You may even try rewriting a portion of his/her/their introduction to make it better. Write your improvements/suggestions below.

3. Provide a summary of the author's narrative (in this summary you should explain what the plot is).

4. Find the point in the author's paper where the conflict/climax is identified. Explain what the conflict/climax is below.

a. If you do not know what the conflict/climax is, write this down at the top of paper (this is an indication that your partner needs to clarify their writing).

5. Identify 2 rising actions from the author's paper. List the two rising actions below.

1)

2)

6. Identify 2 falling actions from the author’s paper. List the two falling actions below.

1)

2)

7. Identify the theme of this paper. Is it conveyed well?

8. WORD CHOICE: Find three verbs and three adjectives that can be improved. Suggest better words to more accurately convey what the author intends. In each instance, suggest a new word that helps to create a better “picture in the reader’s mind” of what is happening. Mark these word changes on the author’s paper as well as in the charts below.

<b>Old VERB</b>	<b>New verb suggestion</b>	<b>Old ADJECTIVE</b>	<b>New adjective suggestion</b>

9. TITLE: Write the author's title here:

- 
- a. Analyze the title. Is it creative? Is it too simple or obvious? Offer feedback and/or suggest an alternative title.

10. CLARITY: It is important that every part of the author's story is clear and that it makes sense. Read his/her/their paper again. Is there any point in the narrative that makes you a little confused? Do you want the author to explain a certain part better so that readers will understand what he/she/they mean(s)?

- a. Use the following codes to mark these points in the writer's story:
  - i. unclear = this part is unclear and needs to be revised
  - ii. awk = this part/word is a little awkward and should be changed
  - iii. exp = explain this more so that it makes better sense for readers

Your Name (Peer Editor): \_\_\_\_\_

Author's Name: \_\_\_\_\_

### **Technical Case Study Peer Editing Checklist**

*\*\*Note: Editing a writer's work is a time consuming but important job. Please take your time with each of the following steps. Do not take shortcuts. We each are only able to become stronger writers if we are given kind, helpful and specific feedback from others. There are many areas on this checklist which require you to think critically about the writer's work and write responses both on the writer's paper and on this worksheet. Be sure to complete all parts. Please return this worksheet to the writer. The writer of the essay will turn this in with his/her/their final draft.*

1. Read the paper with the author and mark with editing codes.
  - a. As you are reading, make any spelling / grammar changes that you find. Be sure to explain to the author why you are changing items.
  - b. Pay special attention to content and paragraphs
    - i. Each time the case study shifts to a new topic there should be a new paragraph indented on a new line
    - ii. Quotes taken directly from the literature should use quotation marks and include a source reference in the sentence containing the quote. everything inside the quotes should be reproduced exactly from the original text. Longer quotes should start on a new line, be centered, have 2 inch margins on both sides, and include a reference preceding the quote.
  - c. Does your author use paragraph formatting with intention?
  - d. Explain at least two grammatical errors in the space below.
    - 1)
  
  
  
  
  
  
  
    - 2)
  
2. Examine the hook and introduction of the paper. How clever and enticing is the hook?
  - a. Does the author create a picture in your mind with his/her/their words?

YES / Needs to improve



- b. Make a suggestion as to how the author can make the introduction EVEN BETTER. You may even try rewriting a portion of his/her/their introduction to make it better. Write your improvements/suggestions below.
3. Provide a summary of the author's case study (in this summary you should explain what the situation/problem/question is).
  
4. Find the point in the author's case study where the situation/problem/question is identified. Explain what the situation/problem/question is below.
  - a. If you do not know what the situation/problem/question is, write this down at the top of paper (this is an indication that your partner needs to clarify their writing).
  
5. Identify 2 important pieces of background information from the author's paper. List the two pieces of information below.
  - 1)

2)

6. Identify 2 details about the solutions/resolutions from the author’s paper. List the two details below.

1)

2)

7. Identify the theme of this paper. Is it conveyed well?

8. WORD CHOICE: Find three verbs and three adjectives that can be improved. Suggest better words to more accurately convey what the author intends. In each instance, suggest a new word that helps to create a better “picture in the reader’s mind” of what is happening. Mark these word changes on the author’s paper as well as in the charts below.

<b>Old VERB</b>	<b>New verb suggestion</b>	<b>Old ADJECTIVE</b>	<b>New adjective suggestion</b>

9. TITLE: Write the author's title here:

- 
- a. Analyze the title. Is it creative? Is it too simple or obvious? Offer feedback and/or suggest an alternative title.

10. CLARITY: It is important that every part of the author's story is clear and that it makes sense. Read his/her/their paper again. Is there any point in the narrative that makes you a little confused? Do you want the author to explain a certain part better so that readers will understand what he/she/they mean(s)?

- a. Use the following codes to mark these points in the writer's story:
- i. unclear = this part is unclear and needs to be revised
  - ii. awk = this part/word is a little awkward and should be changed
  - iii. exp = explain this more so that it makes better sense for readers

11. SECTIONS: Generally, case studies have specific parts. These sections are not necessarily single paragraphs, but they can be. It is also possible to have multiple sections contained in a single paragraph. Read the case study again and check off the sections in the case study that you can identify. If you can't identify a section, don't check it and give a suggestion below of what to add and where within the case study to add it.

- INTRODUCTION
- DESCRIBE SITUATION/PROBLEM/QUESTION
- GIVE BACKGROUND INFORMATION
- DESCRIBE THE SOLUTION/RESOLUTION
- ANALYSIS OF SOLUTION/RESOLUTION
- SUMMARY

## Paper Writing Rubric Altered from 6+1 Trait Writing Model

Essay Rubric 6+1 Trait Writing Model

Student Name:

Category	4	3	2	1	0
Focus on topic (content)	There is one clear, well-focused topic. Main idea stands out and is supported by detailed information.	Main idea is clear, but the supporting information is general.	Main idea is somewhat clear, but there is a need for more supporting information.	The main idea is not clear. There is a seemingly random collection of information.	There is no main idea or not attempted
Accuracy of facts (content)	All supportive facts are reported accurately.	Almost all supportive facts are reported accurately.	Most supportive facts are reported accurately.	Few facts are reported or most are inaccurately reported	No facts are reported or most are inaccurately reported
Introduction (organization)	The introduction is inviting, states the main topic, and previews the structure of the paper.	The introduction clearly states the main topic and previews the structure of the paper, but it is not particularly inviting to the reader.	The introduction states the main topic, but does not adequately preview the structure of the paper nor is it particularly inviting to the reader.	There is no clear introduction of the main topic or structure of the paper.	No attempt made
Sequencing (organization)	Details are placed in a logical order and the way they are presented effectively keeps the interest of the reader.	Details are placed in a logical order, but the way they are presented sometimes makes the writing less interesting.	Some details are not in a logical or expected order, and this distracts the reader.	Many details are not in a logical or expected order.	There is little sense that the writing is organized.
Flow & rhythm (sentence fluency)	All sentences sound natural and are easy on-the-ear when read aloud. Each sentence is clear and has an obvious emphasis.	Almost all sentences sound natural and are easy-on-the-ear when read aloud, but 1 or 2 are awkward or difficult to understand.	Most sentences sound natural and are easy-on-the-ear when read aloud, but several are awkward or difficult to understand.	The sentences are difficult to read aloud because they sound awkward, are distractingly repetitive, or difficult to understand.	No attempt
Word choice	Writer uses vivid words and phrases that linger or draw pictures in the reader's mind, and the choice and placement of the words seems accurate, natural, and not forced.	Writer uses vivid words and phrases that linger or draw pictures in the reader's mind, but occasionally the words are used inaccurately or seem overdone.	Writer uses words that communicate clearly, but the writing lacks variety, punch, or flair.	Writer uses a limited vocabulary, which does not communicate strongly or capture the reader's interest. Jargon or clichés may be present and detract from the meaning	No attempt

## REFERENCES

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