CRITICAL ANALYSIS OF READING AND WRITING MEAP SCORES
FOR THE ISHPeming SCHOOL DISTRICT:
CONCLUSIONS AND RECOMMENDATIONS
by
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Abstract

The following is a critical analysis of the Reading and Writing MEAP scores for the Birchview Elementary School, a part of the Ishpeming School District. A look at our nation’s writing deficiencies and at the correlation between writing and reading is included. Literature reviews are conducted on articles related to the topic of improving writing literacy in classrooms. Data specific to Birchview Elementary’s Forth Grade 2010-2011 Writing and Reading MEAP scores is analyzed. Recommendations and conclusions for the district are made.
Chapter I: THE PROBLEM

Statement of Problem

During the past decade, students in the Ishpeming School District have received lower than state average writing scores on their MEAP (Michigan Educational Assessment Program) testing. However, the district’s reading scores have been above state average. The district has been working to improve writing literacy, and thus raise writing scores. Little progress has been made. In this paper, I examine some of Ishpeming’s students’ MEAP scores in both writing and reading, and try to make sense of why so many students are excelling in reading, but not in writing (according to state standards).

The United States Government (along with the state of Michigan) requires public schools to make Adequate Yearly Progress (AYP). AYP is a measurement defined by the No Child Left Behind Act that permits the Department of Education to rate how every public school district in the country is performing academically based on standardized tests results (and other criteria). If a district/school does not make AYP for three consecutive years, the government may step in with one or more of the following actions: closing and reopening as a charter school, replacing staff, contracting out services, state takeover (allowing state education agencies to manage operations), and other types of reform (http://www.ed.gov/).

Over the past two years, the Ishpeming School District did not make Adequate Yearly Progress. This past year AYP was not made based on a finding that Ishpeming did not test 95% of their economically disadvantaged students. The Ishpeming School District is contesting this accusation.
If the district continues to score below average on the writing portion of the MEAP, they may be prone to severe repercussions. The staff is dedicated to finding a solution, yet has come up short. Providing the best education possible for each and every student is the goal. Writing literacy is a must for all students, those who are college-bound and those who are work-bound. Therefore, we need to find out where the problems lie within writing instruction, and make a change. Through this study, I hope to help in the pursuit.

**Research Question**

What is the reason for the Ishpeming School District’s low writing MEAP scores? Is there a correlation between our areas dialect and our district’s lack of writing proficiency? What can be done to increase our students’ writing literacy?

**Definition of Terms**

**Defining Literacy and Literacy Education**

Literacy is a term that has been defined and redefined throughout the history of our nation’s school systems. From learning to read in early schoolhouses on hornbooks to today’s ever-evolving educational practices, the teaching of literacy has been (and is) at the core.

Through out time, literacy has been defined by a competence in reading and writing. In this age of technology that we live in today, students must learn to navigate and accredit resources via the internet, where millions of works are published daily.
Literacy education now must encompass skills such as problem-solving and critical thinking (Armstrong & Warlick, 2004; Mathers, 2008).

**Defining Quality Writing Instruction**

The process of writing (proficiently) requires the coordination of many high level complex thinking skills. Competent writers must be able to generate and manage ideas, build and act upon plans, review-revise-rewrite, and self-assess. Writers must understand the components of a story, have a strong sense of vocabulary, grammar, and mechanics, and know how to address a specific type of audience (Olinghouse & Leaird, 2008).

**Summary**

The abilities to read and write are interconnected and develop parallel to one and other (Parette, Hourcade, Dinelli, & Boeckmann, 2008). Therefore, learning to write effectively can play a role in learning to read successfully. In teaching students to read, we are asking that they be receivers of information. In the teaching of writing, students become senders of information. Both skills are equally important to learn (Short, 2008). For example, a middle school student reads about a dilemma that is plaguing their school or city in a local newspaper. He wants to do something to provoke change. The ability to respond and take action will require more than his ability to read the article. If he has been taught the tools to write, he could send in a well-reasoned editorial to this same paper, he could start an internet campaign, or he could send a letter to the local authority involved.
Teaching students to be writers takes more than a spelling list and a journal topic.

Teaching students to write is a process with many steps that starts at an early age and builds throughout school careers.
Chapter II: **LITERATURE REVIEW**

In order to better examine Ishpeming’s writing deficiencies, I wanted to see what research has been done that relates writing to reading. I also wanted to find ways/methods in which other schools and teachers have improved their students’ writing abilities.

*Research examining the Writing/Reading Connection*

The evidence is clear that writing can and should be used as a tool to enhance reading comprehension. Graham and Hebert (2010) sought to answer the following three questions:

1. **Does writing about material students read enhance their reading comprehension?**
2. **Does teaching writing strengthen students’ reading skills?**
3. **Does increasing how much students write improve how well they read?**

In the report, Graham and Hebert expressed concern over current literacy skills of American students, suggesting that too many are not reading or writing to grade-level expectations. This, they say, causes a dilemma for not only the students once entering the work place, but for our country as a whole.

Using writing as a tool to enhance reading is too often overlooked. Both skills offered together can increase comprehension of new ideas. When using writing in core subject areas to record, connect, analyze, personalize, and manipulate key ideas, a better understanding of the text is likely. Because reading and writing are connected through their use of common knowledge and the learning process, increasing literacy in one area should thus increase literacy in the other area. Both reading and writing are
communication skills. Through classroom observations and interviews with students and educators, Graham and Herbert (2010) found that when students are required to write texts of their own, they gain broader insight into what is written by others, boosting reading comprehension.

Glenn (2007) took a close look at this correlation between reading and writing in the Young Adult Literature Writing Project, which was conducted in a graduate-level young adult literature course offered as an elective for a teacher education program. Participants included five secondary English education students and three elementary education students. The students were required to write two pages of fictional writing per week, outside of their YA Literature coursework. They also wrote reflections on their reading assignments.

The writing assignments and reflections were analyzed at the end of the semester using the constant comparative method, and ideas that identify a writing-to-reading connection seemed to emerge. The results of the study showed that when writers read, they display deeper insight into the text. Their responses to why, how, and what were thoughtful. Glenn felt as though the participants demonstrated outstanding reading habits as a direct result of their writing commitment (Glenn, 2007).

Research on our Nation’s Writing Deficiencies

According to findings from the 2007 National Assessment of Educational Progress (NAEP), only a small percentage of students showed solid academic performance in writing. Thirty-three percent of eighth-grade students and 24% of twelfth-grade students performed at or above the “proficient” level. This means that two thirds of
eighth grade students and three quarters of twelfth-grade students score at either the basic level or below in writing (Graham and Herbert, 2010).

With unemployment numbers high and our nation’s economy at a low, being prepared for the job world is crucial for young adults. High-level literacy skills are almost a universal requirement for employees looking to enter service industries such as finance, insurance, real estate, construction, and manufacturing (which happen to be areas of job growth). Unfortunately, statistics show that 40% of high school graduates lack the literacy skills that employers seek (National Governors Association, 2005). Also, nearly one-third of high school graduates are not prepared for college-level English composition courses (ACT, 2005).

*Research looking at Improving Writing Literacy*

Graham and Hebert (2010) offered suggestions for improving writing literacy in students. These are common practices in most Language Arts classrooms, but the authors remind educators of their importance.

One proven method of increasing skills is to have students write about a text that they have read. Students’ comprehension of science, social studies, and language arts texts is improved when they write about and respond to what they read (writing personal reactions, analyzing and interpreting the text), write summaries of a text, write notes about a text, answer questions about a text in writing, or create and answer written questions about a text.

In a study done in a college Physics course, Kalman, Aulls, Rohar, and Godley (2008) set out to examine the effects that reflective writing would have on individuals’
understanding of difficult text. The authors requested assistance from a class of around 100 students. Over half volunteered to help. Only five students were then selected from the 50. These students varied in gender, race, and academic standing. Throughout the Physics course, the volunteers reflected on their reading through the use of writing. Their writings were collected and analyzed. Interviews were also held, to discuss their progress and understanding. Kalman et al. had a goal of determining if students using reflective writing appeared to be more engaged in their learning. They wanted to see if the volunteers would retain the information, not just retell or memorize it. After the writing assignments and interviews, the authors concluded that all five students perceived reflective writing aided in their understanding of the text. Three out of the five noticed that the writing enabled them to recognize when they did not understand a section of the reading, and inductively solve their problems within the text. The other two students were more moderate in their responses to their results.

Another strategy for improving writing literacy is through the craft of writing and teaching the writing process. Students’ reading skills and comprehension are improved by learning the skills and processes that go into creating text, specifically when teachers teach the process of writing, text structures for writing, paragraph or sentence construction skills (improves reading comprehension), teach spelling and sentence construction skills (improves reading fluency), and teach spelling skills (improves word reading skills) (Graham & Herbert, 2010). Corden (2007) set out to investigate the effects of teaching literary devices (the writing process) on students’ narrative writing. He wanted to see if children’s writing would benefit from the use of authors as mentors. Eighteen elementary teachers collaborated in the research over one school year. The data
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were collected during daily writing sessions and weekly workshops via video and audio recording of peer-peer, teacher-peer and teacher-class discussions. The students’ writing was collected at the beginning of the school year and at the end in order to compare and monitor progress. Coden, along with the participating teachers, reviewed the videos and writings of the students and concluded that by the end of the school year the students became more reflective writers. They also noticed that the children developed a greater awareness of writing structure, audience, and style.

*Other Research on Improving Writing Literacy*

**WRITING WORKSHOPS**

How students view their own writing can say a great deal for the quality of writing instruction that they are receiving. A study involving an ongoing school-university partnership project reports on the changes in a group of third grade students’ self-perceptions as writers over the span of one academic year after conducting consistent writers’ workshops (Short, 2008).

Students were given the Denver Writing Attitude Survey in the fall and again in the spring. They were also interviewed throughout the school year. This format makes for a non-experimental study. After a great deal of modeling by their teacher and Short (a college professor), the students’ work exhibited greater knowledge of the process of writing (conferencing, editing, revising, etc.). Short concluded that an increase in the amount of writing students did in and out of school was noted and that students had boosted positive perceptions of themselves as writers overall. These results were concluded by an impartial party, and based on reviews of students’ work and the student
interviews that occurred throughout the study. Seeing as though Short herself took part in the procedure, the study has flaws.

CROSS-AGED TUTORING

While many ELA teachers, such as Short, are focusing their writing time on workshops and the process itself, others are looking to older students for assistance. How much do children's attitudes (motivation) play a significant role in their becoming literate? Paquette (2008) researched what (if any) impact a cross-age tutoring program would have on students’ attitudes towards the subject of writing. Fifty fourth-grade students and 35 second-grade students from a rural elementary school participated. Because the participants could not be randomly assigned to treatment and non-treatment groups (i.e., each group was an assigned classroom of students), a pretest-posttest nonequivalent design was developed. Treatment and non-treatment groups took pretest and posttest writing attitude surveys, which served as the study’s measurement instrument. Analysis of the writing attitude survey scores did not show a significant difference between the pretest and posttest groups. However, personal interviews supported the idea that cross-age tutoring programs provided students a sense of confidence in and motivation for their own writing. The students’ attitudes about writing seemed to improve. Paquette concluded that because of this attitude change, this type of program can easily engage children in the craft of writing and can provide abundant positive writing opportunities for all learners involved.
IMPROVING ASSESSMENT PROCESSES

Like the authors mentioned above, Principal Shaun Paolino was concerned about his students’ writing abilities due to low scores on state ELA benchmark tests. Searching for a way to improve writing scores, Paolino brought together his 6th, 7th, and 8th grade English teachers, along with a local professor to collaborate and set goals for improvement in this area. Three goals were set by the group: 1. Make assessment processes, criteria, and standards crystal clear to students. 2. Provide frequent, useful feedback to students about the quality of their work via teacher, peer, and self-assessment. 3. Use the assessments to analyze the strengths and weaknesses in students’ work and to plan instruction (Andrade, Buff, Terry, Erano, & Paolino, 2009).

Using state standards and the 6+1 Traits of Writing, the team developed two rubrics to work from (one for grades 6-7, one for 7-8). They then set out to engage students in examining the strengths and weaknesses of their own writing (by using the formed rubrics). To measure results, the researchers compared pre and post grades/progress in writing. They also questioned students about their struggles with the writing process and how teachers could help. The results from the reform on assessment processes were positive. The researchers noted improvements in students’ writing based on teachers’ reflections and increased test scores in ELA benchmark tests.

VISUAL AIDES

Pictures and other forms of visual aides are often used by teachers to evoke ideas and thoughts in children and to spark creative writing. Nine graduate students (with an average of 6 years teaching experience) examined the effects of teacher-chosen visual
aids on children's writing responses. One hundred and sixty-five elementary students (kindergarten-second grade) participated in the two phases of research (Joshua, 2007).

Careful consideration was put into choosing the visual aids that would be used with the students. To determine the effectiveness of the prompts, teachers counted the number of words that each student wrote (kindergarten teachers counted the number of letters). Students’ writing was then critically examined using the 6+1 traits. Teachers of the same grade level were designated to either the experimental (visual aide) or the control (oral prompt) group and given alternate prompts on the same day. In looking at the results of this study, a slight improvement in the quality of writing was noted by teachers. However, no significant difference in the quantity of writing with or without the picture prompt was reported, except for ELL students (English-language learners) and kindergartners.

The above research offers results to some of the different methods in which to improve writing literacy. As mentioned early, in order to truly be a reader, a student must also be a writer. They must be able to reflect upon, question, and summarize what they have read (or are reading). They must be able to write their own pieces, in order to better understand others’ text. Reading and writing are dependant on one and other. Using the results of these studies can aide the Ishpeming School District in their quest to boost their MEAP Writing scores.
CHAPTER III: PARTICIPANTS/PROCESS

This section includes an analysis of the reading and writing scores earned by the sixty-five fourth grade students (38 girls, 27 boys) enrolled at Birchview Elementary School in the Ishpeming School District. The Ishpeming School District is a small district located in Michigan’s Upper Peninsula. The current student population grades K-12 is nearly 900. Birchview Elementary, which is the district’s only elementary school, houses approximately 320 of these students.

Ishpeming’s free/reduced lunch rate is 56%. The area is known for its improper English dialect, which seems to derive from a combination of its prominent Finnish heritage and its mid-western and Canadian borders. This dialect, or accent, may play a role in the district’s low writing scores. The way a student speaks at home and at school will no doubt resonate in their writing.

I analyzed Birchview’s 2010 fourth grade writing MEAP scores through the Data for Success website (http://www.data4ss.org/). This site provides targeted reporting of test scores (including MEAP) to aide in decision making for school improvement. It includes web-based inquiries, which can show grade level scores, class scores, and even individual student scores in each tested subject area for a district and school. I accessed graphs and charts that show how the Ishpeming School District’s students scored in reading and writing in comparison to state averages and past years. I also compared how individual students scored in both reading and writing, and look for a correlation between the two subject areas. The goal of this site is to provide educators and administrators with the information and tools needed to increase student achievement.
CHAPTER IV: FINDINGS

The first inquiry that I did on the data4success website was of Birchview’s 2010/2011 fourth grade Writing MEAP scores. The site broke down each level of performance (Level 1 – Level 4) for both the Ishpeming School District (which would be Birchview’s scores, seeing as though it is the only elementary school in the district) and the State of Michigan. The results were as follows:

The graph shows that 6.2% of Birchview’s fourth graders scored at Level 1 (Advanced), compared to an 11.5% state average. At Level 2 (Proficient), Birchview had
a total of 37.5% score, compared to a state average of 35.7%. 53.1% of Birchview fourth graders scored at Level 3 (Partially Proficient), compared to 47.8% at the state level. Finally, at Level 4 (Not Proficient), Birchview had 3.1% of its students, where the state had a 5% average. Overall, only 43.7% of Birchview’s fourth graders scored at Level 1 or 2 (which are considered passing levels). This is in comparison to 89% of those same fourth graders who scored at Level 1 or 2 in Reading. So if there is a correlation between reading and writing, why are most of Ishpeming’s students testing proficient or above in reading, but not in writing?

I decided to look further into which areas of writing were of greatest concern. I did a second inquiry as to how Birchview scored in each tested strand of writing. The Writing portion of the MEAP is broken down into five areas of writing. Ishpeming’s results were as follows:
According to this graph, Birchview’s lowest areas were in Writing Process and Spelling. Because Writing Process was both a low scoring section, and accounted for the largest percentage of points possible, it seemed to be the primary area of concern. Though desired scores for the district in all areas of writing could be higher, Writing Process was a weak link.

Through the same website, I conducted some individual student inquiries, mostly in the area of Writing Process. I chose four students from Birchview’s fourth-grade class. Student “A” scored at Level 4 (Not Proficient) in Writing and scored at Level 2 (Proficient) in Reading. Student “B” scored at Level 3 (Partially Proficient) in Writing and Level 1 (Advanced) in Reading. Student “C” scored at Level 2 in Writing (Proficient) and Level 1 (Advanced) in Reading. I noticed it was a common trend for the students to score at Level 2 or 3 in Writing, while scoring at Level 1 in Reading. Finally, Student “D” scored at Level 1 (Advanced) in both Reading and Writing.

Student “A”, who earned Above Proficient scores in Reading on the 2009-2010 MEAP (Writing is not tested on the Third Grade MEAP), and scored at a Proficient level in Reading in 2010-2011, was one of Ishpeming’s two fourth graders who scored at a Not Proficient level (Level 4) in Writing. Student “A” scored 3 out of 17 in the strand of Writing Process. This 18% was the student’s lowest area.

Student “B”, who earned Above Proficient, scores in Reading for both the 09/10 and the 10/11 MEAP tests, scored at Partially Proficient (Level 3) in Writing. This student scored 6 out of 17 in the Writing Process strand. Again, Student “B”’s 35% was an area of deficiency.
Student “C” also earned Above Proficient scores in Reading on the Third and Fourth Grade MEAPs. This student scored Proficient (Level 2) for Writing. They received 11 out of 17 in the strand of Writing Process, with a percentage correct of 65%.

Student “D” has scored at Above Proficient in Reading over the past two testing years, and was also one of four Birchview fourth graders to score Above Proficient in Writing. Student “D” had a score of 12 out of 17 for Writing Process. This 71% was a low area for this student also.

When analyzing individual results in writing, it seemed consistent that many Proficient and Above Proficient readers were scoring below state average in writing. Writing Process was a low area for most. These findings lead me to do an inquiry into the thread of Writing Process to see which specific GLCEs (Grade Level Content Expectations) were not being obtained by the Birchview fourth graders. The following were the Writing Process related GLCEs with the largest discrepancies between Ishpeming’s scores and state averages: *Consider audience and purpose for writing* (Ishpeming = 64.1% correct, State = 69.2% correct), *ID peer’s text as needing improved sequence* (Ishpeming = 65.6% correct, State = 74.5% correct), and *Apply or ID a variety of pre-writing strategies* (Ishpeming = 56.2% correct, State = 64.6% correct).

(https://www.data4ss.org/)

Overall, Birchview’s forth graders struggled with writing significantly more than they struggled with reading. They were below state average in a number of writing strands. The largest area of discrepancy was in the thread of Writing Process. This seemed to be a low score for all students – those scoring at all different levels. The students who scored Proficient and above in Reading still struggled with the Writing
portion of the test. The Ishpeming School District needs to take a closer look at their
Writing curriculum and the above research in order to try and make the improvements
necessary to boost MEAP Writing scores.
CHAPTER V: RECOMMENDATIONS

The above findings suggest that the Ishpeming School District, specifically Birchview Elementary School, should take a closer look at their writing curriculum, in particular the area of writing process. I would recommend that, as a staff, they devote a professional development day – ideally one prior to the start of the school year – to analyzing these results and setting forth a plan of action, which should include the following:

Short (2008) concluded that students feel more comfortable with their writing, and tend to produce more, when they participate in writing workshops. At each grade level (1-4 at least), Birchview should engage in writing workshop on a bi-weekly basis. This will give the students time to write and time to get feedback on how they are writing. Along with the workshop time, in-services and resources for the teachers on how to effectively run these workshops should be available.

The Ishpeming School District should also look at ways to bring in published authors as guest speakers and mentors for the students (asking the Parent Group to fund these presenters if necessary). This would provide them with a better understanding of the writing process itself. Mentor programs between grade levels could also be quite beneficial. Paquette (2008) showed how cross-aged tutoring programs can provide students with more confidence and motivation for their writing, while also giving them more writing opportunities.

According to Andrade, Buff, Terry, Erano, & Paolino (2009), improving the ways in which we assess writing can help our students better understand how to write effectively. At Birchview, rubrics should be designed for each grade level (by the grade
level teachers) in order to clearly lay out for the students what will be expected in their writing. These rubrics should be used with all writing assignments in order to give the students consistent feedback on how to write well.

The students at Birchview Elementary should be given ample writing time/assignments. These can be incorporated in all subject areas. They should know what the writing process consists of, and they should be given clear goals to improve upon. With a bit a revamping to their writing instruction, the Ishpeming School District should see improvements in their MEAP results.

**Areas for Further Research**

To further understand the implications of these methods on the actual MEAP scores of the Ishpeming students, I would like to see these recommendations implemented throughout the school year. A comparison of this year’s scores and next year’s scores should then be compiled. If no progress has been made, I would like to see a study done on the effects of our local dialect and economical status on our writing literacy/Writing MEAP scores.
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