



MY Access![®] Efficacy Report

Vantage Learning



MY Access! Efficacy Report

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Overview

Description of MY Access!

MY Access! is an award-winning, online writing instruction and assessment platform and teaching tool that improves student writing proficiency and motivates students to write more frequently by providing immediate scores and continual, adaptive feedback and edit suggestions. As a result, MY Access! rapidly improves student writing proficiency, which helps schools achieve state literacy standards, reduces workload for teachers, and empowers teachers to spend more time on differentiated instruction and intervention.

With MY Access!, students write, submit essays, and then receive immediate scores and personalized instructional feedback. Scores and feedback are provided by IntelliMetric, Vantage Learning's automated essay-scoring technology, and its patented MY Editor[®] and MY Tutor[®] technologies. Teachers can access student writing portfolios online to monitor progress, provide additional feedback, and tailor instruction to address the specific needs of their students. MY Access! offers a writing environment that motivates students to write and gives teachers more time to plan and deliver instruction that is both data driven and differentiated.

Vantage Learning's MY Access!

- provides a suite of interactive prewriting and editing tools including rubrics, writing models, graphic organizers, and word banks;
- delivers immediate holistic and domain scores and MY Tutor's prescriptive and instructional feedback within seconds;
- provides ongoing writing practice that helps prepare students for the rigors of college, the challenges of college entrance exams, and the workplace;
- provides a robust library of over 2,000 cross-curricular writing tasks that are aligned to state, national, and college readiness standards;
- facilitates peer review and positive reinforcement that motivates students to edit and revise their work;
- provides embedded grammar feedback and instructional support in English, Spanish, Chinese, Japanese, Korean, French, and British English, all of which help English language learners master the complexities of English writing;
- supports personalized instruction by using data to drive instructional decisions;
- provides a longitudinal portfolio that includes all drafts, scores, revisions, comments from students and teachers, and reflective journal entries;
- gives teachers more time for planning, decision-making, and one-on-one instruction.

- prepares students for high stakes tests and assessments required by the state for entrance into college and for the workplace;
- empowers teachers to easily customize reports to view student writing and feedback in almost any manner (i.e., frequency distribution, historical summaries, and roster reports);
- significantly increases student achievement (students achieve an 18% improvement in holistic and domain-specific writing scores in as few as three engagements on average); and
- was developed by educators, proven in classrooms, and validated by research.

MY Access! is based on a simple premise: get students to write more frequently, provide them with immediate scoring and feedback, and encourage improvement through continual writing and revising.

Summary of Writing Instruction Research

Students Need to Have Multiple Opportunities to Practice Writing

Students learn to write by writing frequently. Contrary to the popular phrase, in the context of learning to write, practice does not make perfect: practice makes permanent. Studies consistently show that the amount of writing that students complete is positively related to tests of writing ability (Cotton, 1988; Boersma, Dye, Hartmann, Herbert, & Walsh, 1997; Coe, Keys, Meehan, Orletsky, Lewis, Rigney, et al., 1999; Chircop, 2005; Graves, 2013). Writing-intensive programs that require multiple drafts and a high volume of written work, such as those using writing portfolios or software to leverage success in writing, have been particularly effective in increasing writing aptitude across a wide range of students of varying abilities (Boersma et al., 1997; Chircop, 2005). Douglas Reeves (2002), founder of the Leadership and Learning Center, states that “when students write more frequently, their ability to think, reason, analyze, communicate, and perform on tests will improve.” (p. 5). The best schools have frequent assessments and multiple opportunities for students to succeed. The most common characteristic of these high-performing schools is that they have an ongoing writing performance assessment and feedback program (Hattie, 2012).

“The research is crystal clear: schools that do well insist that their students write every day and [are] provided regular and timely feedback” (National Commission on Writing, 2003, p. 28).

MY Access! provides the opportunity for students to write and receive feedback much more frequently than using traditional methods of writing instruction. Combined with a comprehensive curriculum, the ongoing, formative writing opportunities that MY Access! provides maximizes student achievement.

Learning to Write vs. Writing to Learn

Writing is the expression of a student’s thinking, so observing a student’s writing allows us a glimpse into how that student thinks, makes inferences, and understands. During the process of writing, a student moves from a surface level understanding to a deeper form of thinking to construct new knowledge (Fisher, Frey, & Hattie, 2016). Also, students naturally improve critical thinking skills while writing (Quitadamo & Kurtz, 2007). To help students develop thoughts, think critically, and solve problems, students need instruction in how to write effectively to communicate their message. Learning to write includes a myriad of skills: task analysis, idea development, organization, sentence structure, vocabulary, style, and usage. While writing about content-specific knowledge, students must marshal all levels of learning—comprehension, analysis, and synthesis—to create their own knowledge. Thus, students use writing to learn. Further, writing in a content area promotes content learning. Students learn to put their thoughts on paper, thus helping them clarify, organize, and improve the retention of that content (Sedita, 2013).

Cross-Curricular Writing

Writing is critical to all academic subject areas. Studies show that as the emphasis on classroom writing grows, student achievement improves, and when a portfolio program is instituted and students are required to write frequently across all subject areas, students perform significantly better on statewide assessment tests. Evidence exists not only for reading and writing score improvement, but also for score improvements in math, science, and social studies (Freidus, 2010; Pearson, Moje, & Greenleaf, 2010; Jewett, 2013). When students write about what they have read, there is an 18% percentile point increase in the comprehension of what they have read (Graham & Herbert, 2011). Writing must be effectively integrated with classroom instruction to produce the largest gains (Coe et al., 1999; Quesenberry et al., 2000; National Commission on Writing, 2003). Reeves (2000) furthers this opinion and suggests that writing is an integral part of student learning:

Through the complex cognitive processes involved in writing, students can process information in a much clearer way. They 'write to think' and, thus, gain the opportunity to clarify their own thought processes, demonstrating vital critical thinking and reasoning skills. (p. 189)

MY Access! offers over 2,000 source-based and independent writing tasks aligned to major textbook series and state standards, providing cross-curricular writing opportunities in areas such as science, math, health, social studies, art, technology, and career studies.

Feedback Regarding Writing Performance Must Be Timely

Research has shown that timely feedback is essential to improving writing proficiency. Studies indicate that when feedback is received often and in the early stages of writing, it is more likely to be judged by the student as valuable. This feedback will have a positive effect on the quality of the writing (Cowie, 1995). Notably, Graham, Herbert, and Harris (2015) find that there is a 23 percentile increase in the quality of student writing when they are given feedback. The simple feedback questions such as, “Where am I going?,” “How am I going to get there?,” and “What do I do next?” are among the most powerful influences of student achievement (Hattie, 2012). Given immediate feedback, students gain a better understanding of where they are and how they need to proceed to become more successful (Black & William, 2009).

“Feedback is the single most potent teaching strategy that teachers can use with all ages and across all subjects—leading to an average academic gain of 29 percentile points” (Hattie, 2000, p. 5).

Douglas Reeves (2006) refers to the importance of immediate feedback as "The Nintendo Effect." Kids respond to feedback from electronic games because it is immediate, accurate, and incremental. When students receive a two on their electronically scored essay, they are as eager to revise and resubmit the essay for a higher score as they would be to get to the next level of a video game. Immediate, prescriptive feedback is crucial in allowing students to discover what constitutes quality writing. Without immediate feedback, testing becomes nothing more

than an “academic autopsy,” which only details, after the fact, the level of student achievement, with no opportunity for remediation (Reeves, 2007). The purpose of feedback is to immediately help students discover where they are in the learning process and give the next steps for achieving the goal. (Marzano, Pickering, & Pollock, 2001; Graham & Harris, 2005)

MY Tutor targets a student's zone of proximal development while at the same time provides a reach for them that will help them grow. MY Tutor feedback does this by providing bite-sized tasks as well as specific writing models that support writers. Providing bite-sized chunks of information and modeling proper writing samples is a crucial component of literacy instruction for struggling writers. In addition, the writing samples do what Gerald Duffy (2009) advocates literacy teachers do: “demystify.” MY Tutor does this by providing specific think-aloud models of writers that “demystify” the revision process. In addition, the MY Tutor feedback provides very specific, sequential steps that scaffold students to apply revisions to their own writing. The instructional feedback guides the students to become what Nancy Sommers (2012) calls “independent revisers,” and it will also lead them to recognize good writing.

MY Access! analyzes each essay submitted holistically and across five domains of writing:

1. **Focus & Meaning (Focus):** The extent to which the response establishes and maintains a controlling idea (or central idea), an understanding of purpose and audience, and completion of the task.
2. **Content Development (Content):** The extent to which the response develops ideas fully and artfully using extensive, specific, accurate, and relevant details (facts, examples, anecdotes, statistics, reasons, and/or explanations).
3. **Organization:** The extent to which the response demonstrates a unified structure, direction, paragraphing, and transitional devices.
4. **Language Use, Voice & Style (Language):** The extent to which the response demonstrates an awareness of audience and purpose through effective sentence structure, sentence variety, and word choice that creates tone and voice.
5. **Mechanics & Conventions (Conventions):** The extent the response demonstrates control of conventions, including paragraphing, grammar, punctuation, and spelling.

Writing Instruction and Assessment Should Incorporate Clear Learning Objectives

Dr. Robert Marzano (2001) has published a set of widely accepted, research-based factors for successful instruction. In addition to timely feedback, another critical component for success is the use of clear learning objectives.

MY Access! provides detailed scoring rubrics as well as commentaries on exemplar papers so that students are aware of what is required to meet each learning objective. Teachers can set clear instructional goals for a student, such as, “Submit at least four drafts to the writing task, and earn a score of at least a four out of six on the final submission.”

In order to provide immediate feedback to students, MY Access! utilizes IntelliMetric, Vantage Learning’s proprietary automated essay-scoring system. Students can revise essays based on the feedback received and resubmit for a new evaluation of the essay. This recursive process of writing, receiving feedback, revising, and receiving more feedback has been repeatedly shown to be a necessary process for writing proficiency improvement.

Overview of IntelliMetric®

IntelliMetric is an intelligent scoring system that emulates the process carried out by human scorers and is theoretically grounded in the traditions of cognitive processing, computational linguistics, and classification. IntelliMetric must be “trained” with a set of previously scored responses containing “known score” marker papers for each score point. These scored papers are used as a basis for the system to infer the rubric and the pooled judgments of the human scorers. Relying on Vantage Learning’s proprietary CogniSearch™ and Quantum Reasoning™ technologies, the IntelliMetric system internalizes the characteristics of the responses associated with each score point and applies this intelligence in subsequent scoring.

IntelliMetric is based on a blend of artificial intelligence, natural language processing, and statistical technologies. It is essentially a learning engine that internalizes the characteristics of the score scale through an iterative learning process. It is important to note that artificial intelligence is widely believed to better handle “noisy” data and to develop a more sophisticated internalization of complex relationships among features than human scorers.

IntelliMetric is trained to score essays much the same way as expert human raters are trained. Experts are provided anchor papers specific to the prompt, given scores to those papers, and taught why each paper should receive a certain score. Human raters are given additional scored papers for training and are ultimately asked to score some papers on their own. If the human scoring is acceptable with regards to the standard, the human rater is then allowed to score new essays for that particular prompt.

Similarly, IntelliMetric is trained using a set of essays which have already been scored. This training allows the scoring engine to recognize what elements of an essay written to a specific prompt are desirable. The IntelliMetric engine learns what it means to be an essay earning each score point on the rubric. As a result of this training, a prompt-specific model is created. This model can be used to score essays submitted to that prompt.

Every IntelliMetric model in MY Access! has gone through this rigorous process, starting with expert human scoring, training, and validation. If the new model meets the criteria of acceptable performance data (measured in terms of agreement with experts), the model is available for use to provide immediate scoring in MY Access!

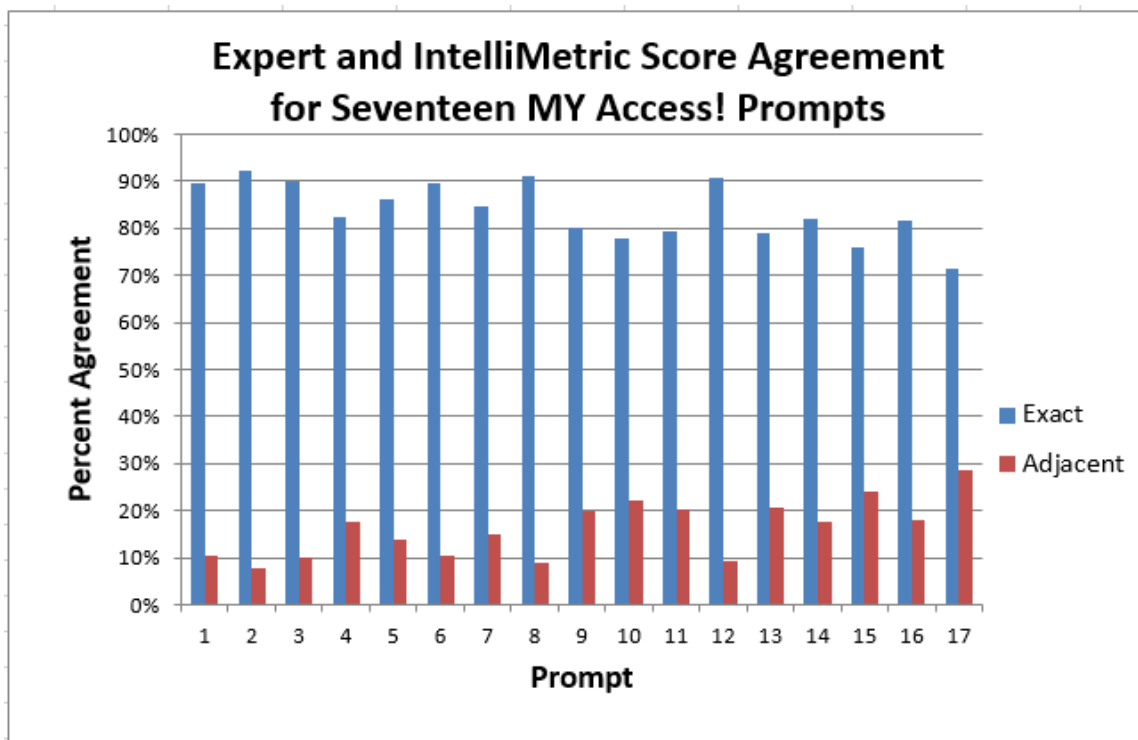
Summary of IntelliMetric Research

Hundreds of studies evaluating IntelliMetric performance data have been conducted. Typically, when evaluating the quality of an IntelliMetric model, the means of the human scores are compared with those of the IntelliMetric model. Then, the agreement rates are calculated, and the Pearson correlation between the scores is calculated. If the means are not significantly different, the agreement rates meet a benchmark of acceptance, and the Pearson correlations are strong, the model is considered acceptable for use. Following is a description of the major types of studies conducted and a summary of results.

Comparison of IntelliMetric and Expert Scores on Validation Sets

The scores assigned by IntelliMetric, and the scores assigned by human experts for the same set of essays are compared. The set of essays used for this validation purposes are not the same as those used in the training set for the IntelliMetric model. This allows for a blind validation of the IntelliMetric scoring compared to the scoring previously done by expert human scorers.

Figure 1



A sampling of IntelliMetric agreement data is shown in Figure 1. For seventeen recently developed prompts, the percentage of exact agreement and percentage of adjacent agreement (score comparisons within 1 point) on a 6-point scale are shown. While this sampling of model data has all models showing 100% agreement within one point, the larger pool of data indicates that IntelliMetric agrees with a final expert score within 1 point typically between 97 to 100% of the time.

For the IntelliMetric models used in MY Access!, the typical standard of agreement is at least 70% exact agreement and 100% agreement within one point. Models that show more than 2% discrepancy (score comparisons greater than 1 point) are not approved for use in MY Access!

Pearson correlations for these same seventeen prompts are shown in Table 1. The higher the positive correlation (which can range from 0 to 1), the more associated the data values are with each other. As shown in Table 1, the Pearson correlations for these seventeen prompts are extremely high, ranging from 0.91 to 0.96. This indicates that there is a very strong positive relationship between IntelliMetric scores and human scores for every prompt.

For all Intellimetric models used in MY Access!, the minimum Pearson correlation is 0.80 and higher. Any model not achieving at least a Pearson correlation of .80 is not approved for use in MY Access!

Table 1

Table 1 Correlations between Intellimetric and Human Scores		
Grade Level	Prompt	Correlation
High School	Making Science Fiction a Reality	0.947
	Global Warming	0.958
	Speeches Discussing Our Environment	0.960
	Cause and Effect in the Revolutionary War	0.963
	Advertising and its Influence on Society	0.974
	Couple with Bicycles (picture)	0.982
Middle School	Tourist Attractions in World Cities	0.928
	The Effects of Eating Disorders on Teens	0.934
	Lewis and Clark Expedition Summary	0.956
	How to Play Your Favorite Game	0.958
	High School Entrance Essay	0.965
	Build Your Own Robot	0.982
Elementary School	Underground Railroad	0.925
	Benefits of Daily Exercising for Young Children	0.941
	Bad Manners	0.946
	Spaceship Trip Through the Universe	0.950
	Robot Teacher	0.963

Comparisons Between Expert Agreement and IntelliMetric-Expert Agreement

We have also investigated how often two experts agreed on an essay's score and compared that to how often IntelliMetric agreed with the experts. We have compared IntelliMetric to the experts in studies involving K-12 students, college admissions candidates, higher education students, and graduate school admissions candidates. In most cases, IntelliMetric was more likely to agree with either expert than two experts were to agree with each other. For example, when we looked at student responses to an eighth-grade writing test, IntelliMetric scores agreed with the experts about 98% of the time while the two experts agreed with each other 96% of the time.

These findings vary somewhat from study to study, but all in all, we typically find that IntelliMetric agrees with experts about 95% to 100% of the time, as often as or more often than two experts agree with each other.

“True Score” Study

Another validation rigor to which IntelliMetric is held is comparing its scores to the average score across many experts. We assumed that the average score of about 8-10 experts was a good estimate of the “real” score for an essay.

We looked at how often IntelliMetric agreed with the average expert score and found that the scores assigned by IntelliMetric agreed with the average scores significantly more often than any individual expert's score agreed with the average score.

In fact, not one of the individual experts did as well as IntelliMetric in comparison to this average score. IntelliMetric was found to more consistently match a “true score” than any single expert rater's score.

External Correlation Studies

The fourth method by which we have evaluated IntelliMetric is in comparison to other means of measuring writing and language skills. We asked the question, “Does IntelliMetric tend to agree with the evaluations of student skills offered by other measures, such as multiple-choice tests, independent teacher judgments, etc.?” We found that IntelliMetric agreed with teachers’ judgments of student writing, student SAT scores, multiple choice writing tests, and several other instruments as well as, if not better than, the scores assigned by experts agreed with these measures. IntelliMetric scores correlate with other measures of the writing construct.

The studies of IntelliMetric scoring accuracy have shown that IntelliMetric:

- agrees with expert scoring, often exceeding the performance of expert scorers;
- accurately scores open-ended responses across a variety of grade levels, subject areas, and contexts;
- shows a strong relationship with other measures of the same writing construct; and
- shows stable results across samples.

A research study published in the Journal of Technology, Learning, and Assessment that was led by Lawrence Rudner of the Graduate Management Admission Council confirmed the accuracy of the IntelliMetric engine (Rudner, Garcia, & Welch, 2006).

Using essays drawn from over 100 prompts, results indicated that IntelliMetric agreed within one point on a six-point scale with human raters on average over 97% of the time. This agreement rate was found to be slightly higher than the agreement rate between two human raters.

As a result, the researchers concluded that IntelliMetric replicates the scores provided by human raters, providing superior agreement rates.

Increased Use of MY Access! Produces Higher Scores

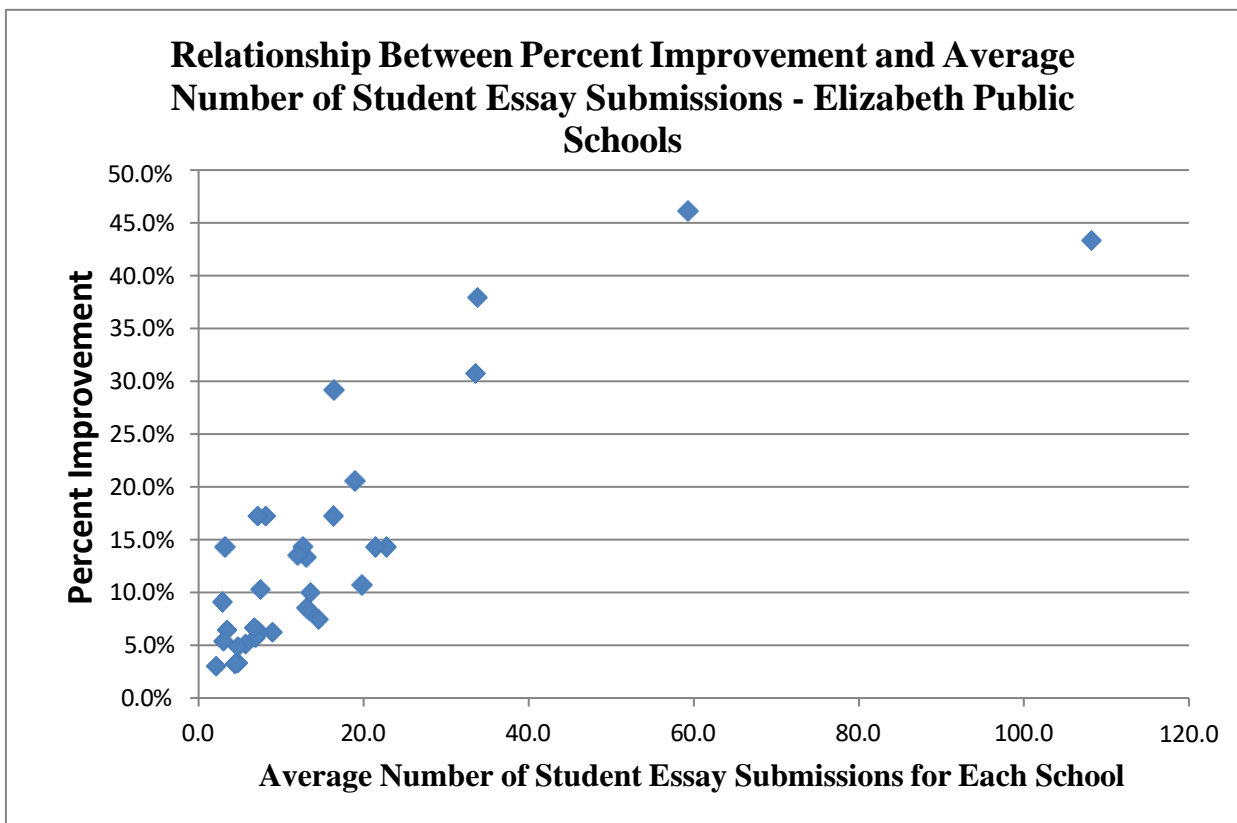
Figures 2, 3, and 4 and Table 2 demonstrate typical examples of student writing improvement with an increased number of writing submissions:

- Figure 2 shows writing improvement for Elizabeth Public Schools, New Jersey.
- Figure 3 documents improvements for Corona Norco Unified School District, California.
- Table 2 illustrates Lancaster School District, California student writing.
- Figure 4 shows similar gains for a collection of ten school districts located throughout the United States.

Elizabeth Public School District, New Jersey

Elizabeth Public School District is a large urban school district of over 24,000 students with a diverse student population. Figure 2 shows the results for 34 schools, containing a total of 9,258 students with 163,454 essay submissions for the 2016-2017 academic school year. While all schools in Elizabeth use MY Access! saw writing improvements, schools that required more student writing saw greater gains.

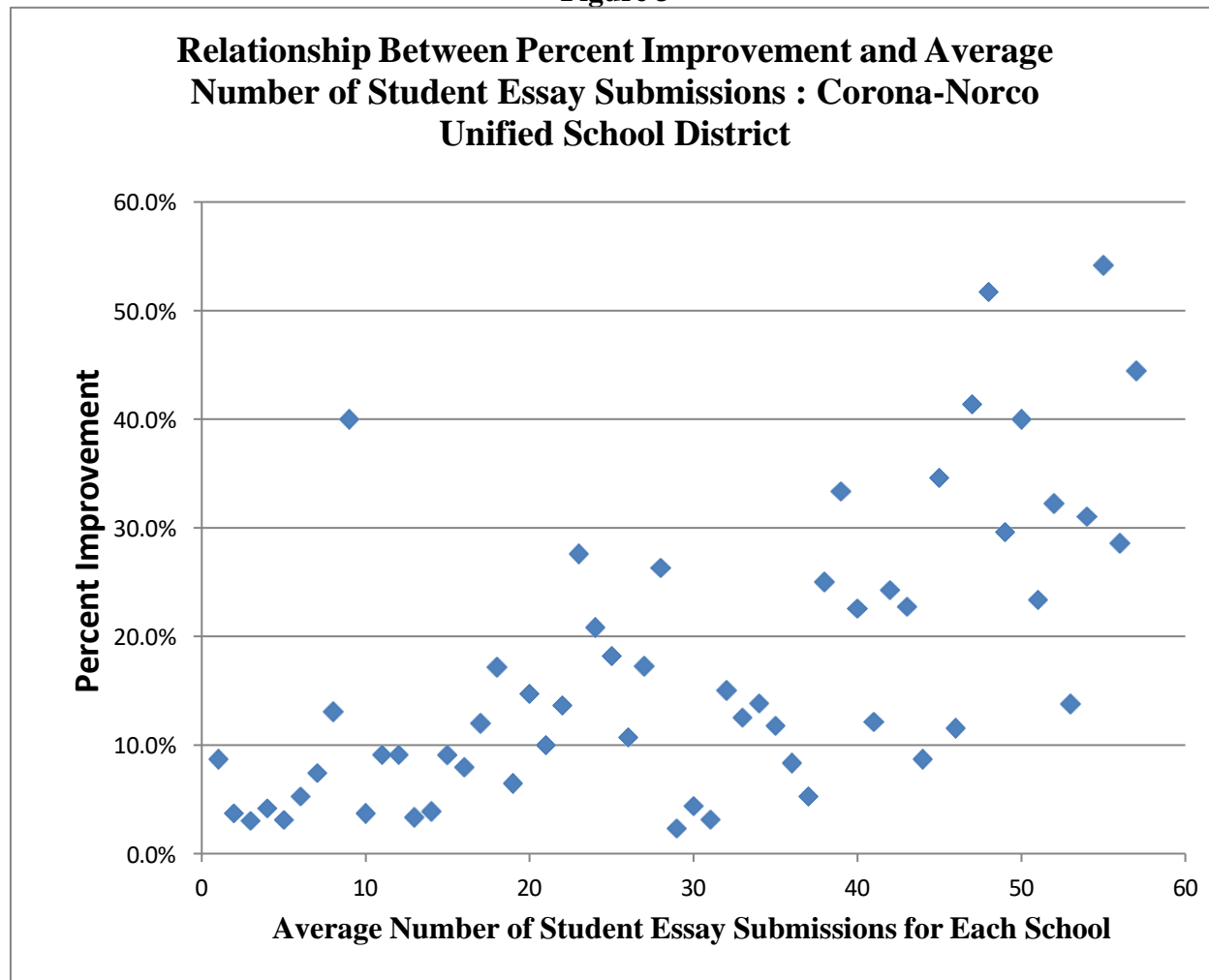
Figure 2



Corona Norco Unified School District, California

In Corona Norco Unified School District, California, 11,850 students submitted 168,444 essays in MY Access! for the 2015-2016 academic school year. Similar to Elizabeth Public School District, Figure 3 demonstrates that schools in Corona Norco that used MY Access! improved student writing proficiency, and schools that used the program more by requiring multiple submissions resulted in significant improvement in writing.

Figure 3



Lancaster School District, California

Table 2 compares essay submission data gathered from Lancaster School District, California with their reported California Assessment of Student Performance and Progress (CAASPP) proficiency percentages by population. The table illustrates the two Lancaster Schools that used MY Access! the most, Amargosa Middle School and Endeavour Middle School, received the greatest performance gains in MY Access! This further supports the claim the more students write using MY Access!, the more they improve the quality of their writing.

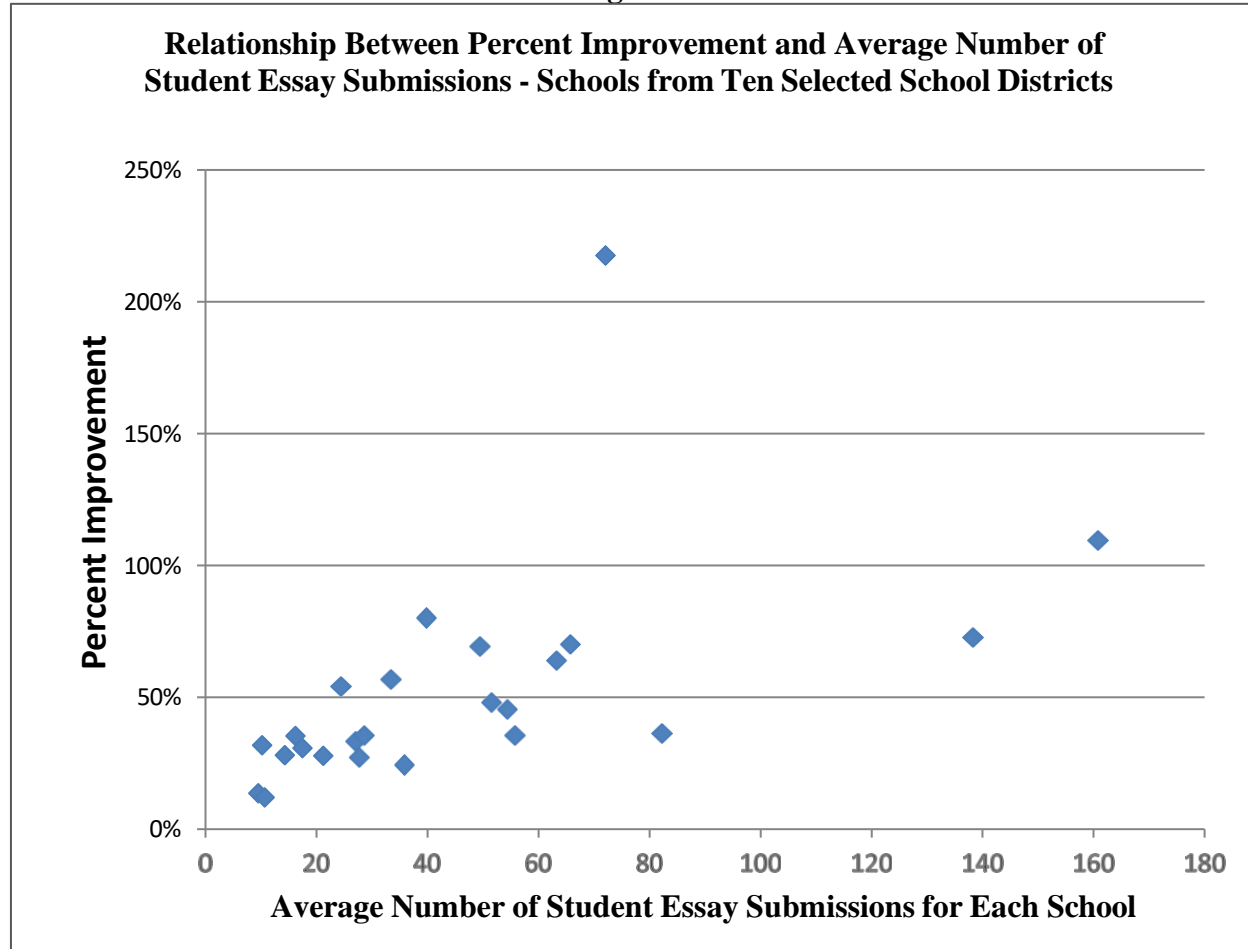
Table 2
My Access Results for Lancaster School District

School	Scale	Headcount	Ave		Percent Improvement	Number of Submissions	Ave Submissions per Student	Writing Claim Category		
			Holistic	Ave Holistic				Above Standard	Near Standard	Below Standard
Amargosa	4	351	2.2	2.5	14.7%	4677	13.3	30.6	51.8	17.1
	6	388	2.4	3.8	55.0%	12728	32.8	36.3	45.9	17.7
Endeavour	4	165	2.6	2.8	8.8%	2310	14.0	11.9	57.2	31.0
	6	178	2.7	3.6	34.2%	4530	25.4	9.6	42.4	48.0
New Vista	4	276	2.8	2.8	3.4%	1755	6.4	15.5	65.8	17.9
	6	29	3.0	3.3	8.4%	79	2.7	10.1	63.3	26.6
Piute	4	299	2.1	2.3	8.5%	5746	19.2	9.7	47.1	43.2
	6	290	2.2	2.4	7.0%	1452	5.0	5.5	55.0	39.0
Fulton & Alsbury	4	184	2.9	3.1	6.1%	1907	10.4	58.9	37.9	3.3
	6	119	3.8	4.2	10.1%	1314	11.0	60.7	38.3	1.1

Collection of School Districts

Figure 4 displays the results for schools within ten school districts across the United States. The ten school districts are located in Utah, Arizona, Pennsylvania, Oklahoma, South Dakota, Virginia, California, and Iowa. The selection of schools includes suburban and rural districts. Collectively, they represent 6,751 students from 24 schools with 193,679 essay submissions. Figure 4 illustrates that as the average number of student essay submissions for each school increases, the percent improvement for each school increases.

Figure 4



MY Access! Case Study Highlights

Students in school districts that have implemented MY Access! attained substantial growth in writing. These increases are evident in higher scores achieved on state-mandated standardized tests as well as increased scores within MY Access! throughout the school year. Students and teachers agree that the features and tools that MY Access! offers, such as instant holistic and domain scoring and personalized instructional feedback, allow students to continuously improve the quality of their writing.

Students Using MY Access! Show Increases in State and National Test Performance

Many school districts and schools have found that students using MY Access! have improved performance on state assessments. Following is a sampling of information submitted from school districts.

- In Alhambra Unified School District in California, middle school students used MY Access! as part of an educational grant. Across 13 different middle schools, over 1,300 7th grade students used MY Access! to help improve their writing proficiency, as measured by scores on the writing portion of the state-mandated STAR test. Seventy percent of the students scored at or above the proficiency level, compared to just 22% only a year ago.
- At the Oasis School in Escambia County, Florida, an alternative school designed for students who are two or more years behind in core subject areas, students using MY Access! had a dramatic increase in writing proficiency. Beginning in 2005, MY Access! was adopted to aid students in writing ability. Throughout the year, students at this school used MY Access! several times a week, with many submitting over 50 essays to up to 20 different prompts. Initially, the majority of students were very poor writers, receiving scores of 1 or 2 on their essays. After using MY Access!, most of these students were writing essays that received scores of 4 or 5. After the first year of use, 89% of students scored proficient on the writing portion of the Florida Comprehensive Assessment Test (FCAT). For the 2006-2007 school year, this academy was the only school in the panhandle of Florida in which 100% of students achieved proficiency on the writing portion of the FCAT.
- Marion Junior High School in Marion, Arkansas, used MY Access! extensively, submitting over 12,000 student writing responses. At the beginning of the school year, 40% of the students were classified by MY Access! to be “At Risk” in terms of their writing proficiency, with only 1% of students designated as achieving a level of “Mastery.” By the end of the school year, the number of “At Risk” students decreased to just 13%, while 87% of students had achieved either “Mastery” or “Proficiency” by the end of the school year. These same students also achieved measurable gains on the Arkansas State Literary Test. Initially, 38% of the 8th grade class at Marion Junior High had scored proficient or advanced on this assessment. After using MY Access!, 69% of this same student cohort scored proficient or advanced.

- Birmingham High School, an economically disadvantaged school in the Los Angeles Unified School District, partnered with Vantage Learning and Apple to bring mobile assessment carts loaded with MY Access! into the classroom. Of the Birmingham High School students who used MY Access! in the 2007-2008 school year, 81% passed the California High School Exit Examination while only 46% of the students who did not use MY Access! passed the exam. The mean passing rate for the total population was approximately 70%. The results of MY Access were so positive and significant that Birmingham High School expanded its use of the program to include all grades.
- School districts in Carbon and Lehigh Counties in Pennsylvania selected MY Access! in an attempt to improve the writing scores of students on the annual high stakes examination, the Pennsylvania System of School Assessment (PSSA). Students were given a pre- and post-test similar to the PSSA to gauge writing achievement. Of the 9th graders that were not proficient on the pre-test, 40% improved to proficient by the end of the study. Of those who did not have the benefit of using MY Access!, only 22% improved to proficient. One school in the study saw over 75% of students rated below proficient achieve proficient scores when using MY Access! The study also showed that levels of proficiency increased the more students used MY Access! On average, low-proficiency students with high MY Access! usage levels improved their post-test scores by 23%, with medium usage levels at 18% and low usage levels at 19%.

Students Using MY Access! Show Writing Proficiency Increases Throughout the Year

Schools that implement MY Access! throughout the school year show increases in writing proficiency from the beginning of the school year through to the end. These schools ensure that students are actively engaged with MY Access! and are provided many opportunities to write and revise.

- During the 2015-2016 academic school year, students using MY Access! at Clayton Ridge in the Keystone Area Education Agency 1 in Iowa experienced essay score improvements of 116.7%. A total of 58 students submitted essays during the 2016-2017 academic school year. Compared to the previous year where students saw 116.7% growth in their writing, students submitting essays an average of 72.1 times achieved 217.6% growth the following year.
- In the Little Red School, a school in Arizona's Santa Cruz Elementary District 28, MY Access! was chosen as a tool to improve students' writing skills. During the academic school year, 131 students submitted 18,628 essays. The average holistic score of students' first submissions was 2.19; by their final submissions, the average holistic score increased to 4.67.
- Our Lady of Las Vegas is a suburban catholic middle outside of downtown Las Vegas, Nevada. MY Access! scored more than 8,648 essays submitted by 229 students during the 2015-2016 school year. As it takes a teacher an average of 10 minutes to

score an essay, MY Access! saved teachers nearly 1,441 hours of grading papers—time they used for planning and instruction. Over the course of the 2016-2017 academic school year, 223 students submitted over 8,864 essays with an average improvement of 78% between their first essay submissions and their most recent.

These are just a few examples of school districts with successful implementations of MY Access! In every case, it is the teachers and administrators who make the program a success.

Teachers and Students Agree that MY Access! Improves the Quality of Student Writing

Numerous studies have shown that students and teachers agree that MY Access! is valuable for improving student writing skills. The combination of writing tools, such as MY Editor, along with instant scoring and MY Tutor personalized feedback, are cited as useful features for motivating students to write more and improve the quality of their writing.

- Students in the South East Educational Technology Consortium (SEETC), a consortium consisting of eight large school districts in Southern California, implemented MY Access! as part of a grant that focused on increasing the use of technology in the classroom. Approximately 33,000 students had the ability to utilize MY Access! Students completed a writing assessment at the beginning and end of the school year. As Figure 5 shows, of the five districts that completed assessments utilizing this pretest-posttest design, students achieved sizeable gains in writing achievement, with scores typically increasing one point on a six-point holistic scale.

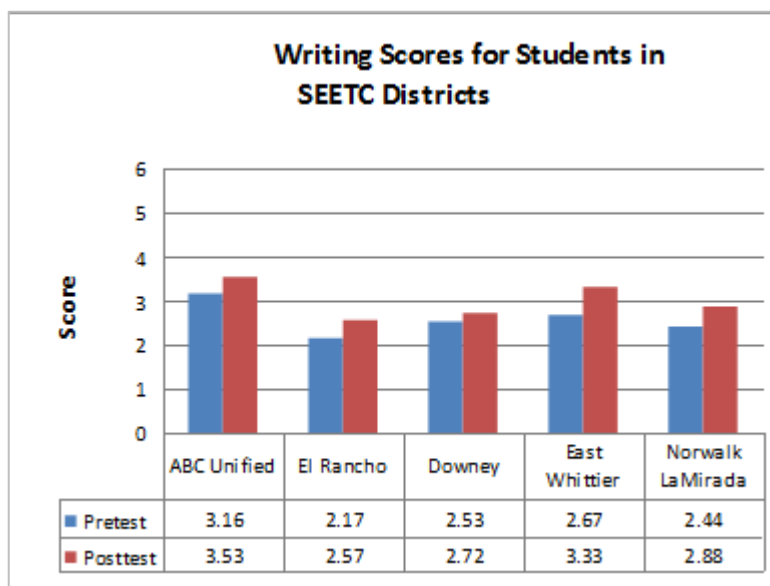


Figure 5

- A study by Yang (2004) also finds that students enjoy using the features of MY Access! Nearly 90% of students agreed that they liked the program because it allowed them to go back and revise their essay, and about 85% of students reported that they liked receiving a score instantly after submitting an essay.

About 80% of students liked having their own portfolio and personalized feedback. The teachers in this study found MY Access! to be very easy to use. They were confident that practicing writing using MY Access! would be helpful to improving students' writing.

- A study conducted by Hoon (2006) indicated that students felt very positively about the use of MY Access! Nearly 80% of the students felt that MY Access! had helped them improve their writing, and more than 90% indicated that they used the provided feedback to improve their writing. They found the online writing resources useful (e.g., the user and writer guides, writer's model catalog, quick reference guide, and instructional units). MY Tutor feedback helped students by breaking down the revision process into small, manageable tasks that reflect the advice a teacher would provide throughout the revision process. The teachers agreed that the most valuable features of MY Access! were the immediate holistic and trait scores and prescriptive instructional feedback.
- The most recent survey conducted by Vantage Learning shows that 91% of educators using MY Access! would recommend to others to purchase the MY Access! program as an instructional/formative classroom tool. In addition, 95% of users view MY Access! as an effective benchmarking and diagnostic tool for preparing for state-mandated writing assessments, and 85% of users are satisfied with key features of MY Access! In particular, the immediate score and MY Tutor feedback, longitudinal portfolios, and comprehensive reporting tools were cited as effective components of the program.

Summary

There is no question that writing proficiency is a skill that every student must possess. MY Access! is based on years of research regarding best practices for writing instruction. MY Access! has been shown to significantly increase the quality of writing for students of varying ability. Case studies confirm that students that use MY Access!, even for a short period of time, have demonstrated substantial gains within MY Access! as well as on state-mandated standardized tests of writing. In addition, both students and teachers alike agree that MY Access! is user friendly. They report being satisfied with the high quality of individualized feedback, the ability to maintain student portfolios, and the ease of revision. The rich instructional features, coupled with the immediate feedback provided by IntelliMetric, make MY Access! a very effective tool for teachers and students to drive writing proficiency improvement.

References

- Achieve the Core. The common core shifts for English language arts/literacy. Student Achievement Partners. Retrieved from <https://achievethecore.org/file/352>
- Black, P. & Wiliam, D. Developing the theory of formative assessment. *Educational Assessment, Evaluation, and Accountability*, 21, 5-31
- Boersma, K., Dye, T., Hartmann, E., Herbert, L., & Walsh, T. (1997). Improving student writing through student self-assessment. Retrieved from <https://files.eric.ed.gov/fulltext/ED411517.pdf>
- Booth Olson, C., Maamujav, U., Steiss, J., & Chung, H. (2023). Examining the Impact of a Cognitive Strategies Approach on the Argument Writing of Mainstreamed English Learners in Secondary School. *Written Communication*, 40(2), 373-416. <https://link.springer.com/article/10.1007/s10648-023-09742-4>
- Chircop, J. (2005). Student achievement soars with use of quality strategies. Retrieved from <https://www.asq.org/economic-case/markets/pdf/kingsley.pdf>
- Chung, H.Q., Chen, V. & Olson, C.B. The impact of self-assessment, planning and goal setting, and reflection before and after revision on student self-efficacy and writing performance. *Read Writ* 34, 1885–1913 (2021). <https://doi.org/10.1007/s11145-021-10186-x>
- Coe, P., Keys, M., Meehan, M., Orletsky, S., Lewis, S., Rigney, S., et al. (1999). Development and validation of successful writing program indicators based on research in continuously improving and continuously declining schools: Report of the Kentucky State writing project study of writing instruction in Kentucky schools. Retrieved from <https://files.eric.ed.gov/fulltext/ED444813.pdf>
- Cotton, K. (1988). Teaching composition: Research on effective practices. Retrieved from <https://eric.ed.gov/?id=ED296343>
- Cowie, N. (1995). Students of process writing need appropriate and timely feedback on their work, and in addition, training in dealing with that feedback. Retrieved from <https://files.eric.ed.gov/fulltext/ED417581.pdf>
- Duffy, G. G. (2009). Explaining reading: A resource for teaching concepts, skills, and strategies. New York, NY: Guilfort Press
- Elliot, S. (2004) *From here to validity in automated essay scoring*. New Jersey: Lawrence Erlbaum Associates.
- Fisher, D., Frey, N. & Hattie, J. (2016). *Visible learning for literacy: Implementing the practices that work best to accelerate student learning*. Thousand Oaks, California: Corwin Literacy.
- Freidus, H. (2010). Finding passion in teaching and learning: Embedding literacy skills in content-rich curriculum. *The New Educator*, 6, 181–195. <https://files.eric.ed.gov/fulltext/EJ913423.pdf>
- Graham, S., Collins, A. A., & Ciullo, S. (2023). Special and General Education Teachers' Beliefs About Writing and Writing Instruction. *Journal of Learning Disabilities*, 56(3), 163-179. <https://doi.org/10.1177/00222194221092156>

- Graham, Steve & Kim, Young-Suk & Cao, Yucheng & Lee, Will & Tate, Tamara & Collins, Penelope & Cho, Minkyung & Moon, Youngsun & Chung, Huy & Olson, Carol. (2023). A meta-analysis of writing treatments for students in grades 6–12.. *Journal of Educational Psychology*. 115. 1004-1027. 10.1037/edu0000819. https://www.researchgate.net/publication/374364086_A_meta-analysis_of_writing_treatments_for_students_in_grades_6-12
- Graham, S., Harbaugh-Shattenkirk, A.G., Aitken, A.A. et al. Writing Motivation. Questionnaire: Factorial and Construct Validity with Middle School Students. *Educ Psychol Rev* 35, 5 (2023). <https://doi.org/10.1007/s10648-023-09742-4>
- Graham, S., & Harris, K. (2005). *Writing better*. Baltimore, MD: Brookes.
- Graham, Steve & Hebert, Michael. (2011). Writing to Read: A Meta-Analysis of the Impact of Writing and Writing Instruction on Reading. *Harvard Educational Review*. 81. 710-744. 10.17763/haer.81.4.t2k0m13756113566.
- Graham, S., Hebert, M., & Harris, K.R. (2015). Formative assessment and writing: A meta-analysis. *Elementary School Journal*, 115, 524-547.
- Graves, D. (2013). *Children want to write: Donald Graves and the revolution in children's writing*. T. Newkirk & P. Kittle (Eds.). Portsmouth, NH: Heinemann.
- Hattie, J. (2000). *How to give feedback to students: The advanced guide*. The Australian Society for Evidence Based Teaching, 5. Retrieved from <https://www.evidencebasedteaching.org.au/how-to-give-feedback-to-students/>
- Hattie, J. (2012) *Visible learning for teachers: Maximizing impact on learning*. Milton Park, Abingdon, OX: Routledge.
- Hochman, J. & Wexler, N. (2017). *The writing revolution: A guide to advancing thinking through writing in all subjects and grades*. San Francisco, CA: Jossey Bass.
- Hoon, T.B.. (2006). Online automated essay assessment: Potentials for writing development. AusWeb 2006: 12th Australasian World Wide Web Conference. https://www.researchgate.net/publication/288211005_Online_automated_essay_assessment_Potentials_for_writing_development
- Jewett, P. (2013). Content-area literacy: Recognizing the embedded literacies of science and mathematics. *Journal of Reading Education*, 38, 18-24.
- Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Marzano, R. J. & Sims, J. A. (2013) *Coaching classroom instruction*. Bloomington, IN: Marzano Research Laboratory. Retrieved from https://www.marzanoresources.com/resources/tips/cci_tips_archive#tip4
- Moore, N. S., & MacArthur, C. A. (2016). Student use of automated essay evaluation technology during revision. *Journal of Writing Research*, 8(1), 149–175. <https://doi.org/10.17239/jowr-2016.08.01.05>
- Moran, Renee & Billen, Monica. (2014). The Reading and Writing Connection: Merging Two Reciprocal Content Areas:. *Georgia Educational Researcher*. 11. 10.20429/ger.2014.110108. https://www.researchgate.net/publication/307821365_The_Reading_and_Writing_Connection_Merging_Two_Reciprocal_Content_Areas
- National Commission on Writing. (2003). The neglected "R": The need for a writing revolution. Retrieved from https://www.collegeboard.com/prod_downloads/writingcom/neglectedr.pdf

- Pearson, P. D., Moje, E., Greenleaf, C. (2010). Literacy and science: Each in the service of the other. *Science*, 328(23), 459-463.
- Quesenberry, L. et al (2000). Assessment of the writing component within a university general education program. Retrieved from <https://wac.colostate.edu/aw/articles/quesenberry2000/quesenberry2000.pdf>
- Quitadamo, I. J. & Kurtz, M. J. (2007). Learning to improve using writing to increase critical thinking performance in general education biology. *CBE Life Sci Educ.*, 6(2), 140–154. doi:10.1187/cbe.06-11-0203
- Reading and Writing Across the Curriculum: An NCTE Policy Research Brief. (2011). *Council Chronicle*, 20(3).
- Reeves, D. B. (2000). *Accountability in action: A blueprint for learning organizations*. Eaglewood, CO: Advanced Learning Press.
- Reeves, D. B. (2007). Douglas Reeves shares “brutal facts” and promising practices at Measured Progress event. Retrieved from <https://measuredprogress.org/aboutus/news/reeves.html>
- Rudner, L. M., Garcia, V., & Welch, C. (2006). An evaluation of IntelliMetric® essay scoring system using responses to GMAT® AWA prompts. *The Journal of Technology, Learning, and Assessment*, 4(4), Retrieved from <https://ejournals.bc.edu/ojs/index.php/jtla/article/view/1651/1493>
- Sedita, J. (2013). Learning to write and writing to learn. In M. C. Hougen, *Fundamentals of literacy instruction & assessment: 6-12*. Baltimore, MD: Paul H. Brookes.
- Sommers, N. (2012). *Responding to student writers*. Boston, MA: Bedford/St. Martin's
- Steiss, Jacob & Krishnan, Jenell & Kim, Young-Suk & Olson, Carol. (2022). Dimensions of text-based analytical writing of secondary students. *Assessing Writing*. 1. 100600. 10.1016/j.asw.2021.100600.
- Yang, N. (2004). Using MY Access!® in EFL writing. Paper presented at the 2004 *International Conference and Workshop on TEFL & Applied Linguistics*. Compiled by the Department of Applied English, Ming Chuan University, 550-564.
- Write Experience™ Leads to Improved Writing Skills. (2014). *CENGAGE Learning*. Retrieved from https://resources.vantage.com/wp-content/uploads/wp_write-experience-1.pdf
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