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How Writing Instruction, Interventions, and Assessment Can Improve Student Outcomes

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Writing does not automatically enhance students' learning. To be effective, content area writing activities need to be thoughtfully constructed, explicitly taught, and appropriately supported.

THE GEORGE W. BUSH INSTITUTE SEEKS WITH ITS MIDDLE SCHOOL MATTERS INITIATIVE TO INCREASE THE NUMBER OF MIDDLE GRADE (GRADES 6–8) STUDENTS WHO ARE PREPARED TO COMPLETE HIGH SCHOOL AND EARN A DIPLOMA.

The Middle School Matters (MSM) initiative at the George W. Bush Institute seeks to increase the number of middle grade students who are prepared for high school and postsecondary success. Middle School Matters' mission is to transform the middle grades by promoting high quality research-based strategies and practices to drive the development of policies that lead to better student outcomes. The two primary methods to help us achieve this are 1) using solid research to develop practical tools and support for middle grade reform initiatives, school districts, and middle school campuses to apply in their work, and 2) promoting the importance of research-based strategies and practices with individuals making decisions for middle grade students.

The ability to write effectively and use writing as a tool for learning is essential for students' success in the middle grades—and beyond. This practice guide highlights several research-based practices that can be used school-wide to help middle grades students become better writers. Educators can use this information to compare and contrast the practices currently implemented at their school with those that have been validated as effective and then identify ways to improve student success.

There are research-based principles and practices related to writing instruction that middle grades teachers can use to help improve student outcomes. Many strategies can be used school-wide to help all students learn to use writing as a tool for learning, communication, and self-expression. Others are designed to provide students who struggle with writing the additional support they need. Together, these recommendations will help students develop the writing skills they need not only for success in middle and high school, but also for post-secondary education, future careers, and civic life.

What follows are four questions middle grades educators might ask about effective writing instruction and assessment, followed by Dr. Santangelo & Dr. Graham's responses, based on their knowledge of research in this area.

QUESTION:

What are the important components of an effective writing instruction program?

One of the best ways to understand what comprises effective writing instruction for middle grades students is to first consider how students become skillful writers. Research suggests four factors are particularly important. First, students need to be knowledgeable about the general characteristics of good writing (e.g., conveying ideas in an organized manner, using language that is appropriate for the target audience), as well as specific features associated with different genres (e.g., including refutation in a persuasive essay, effectively developing characters in a fictional story). Second, students need to be able to effectively use a variety of strategies that help writers accomplish the multiple steps and processes involved with composing. These include, for example, establishing goals and monitoring progress towards those goals; planning, drafting, revising, and editing text; and overcoming challenges and frustration. Third, students need to be proficient with the foundational skills required to translate ideas into written text, such as handwriting/keyboarding, vocabulary, spelling, and sentence construction. Finally, students need to be motivated to engage in the writing process.

Given that framework, an important guiding principle for middle grades leaders and teachers to remember is that an effective writing instruction program is one which purposefully integrates research-based practices targeting each of these four areas. A few examples of research-based practices that can be used by teachers in all content areas are listed below.

- **Knowledge:** Explicitly teach students about the characteristics of good writing and the features of specific types of text. Help students analyze and emulate exemplary models of writing.
- **Strategies:** Explicitly teach students developmentally-appropriate strategies for planning, drafting, revising and editing text, and develop their ability to select and use them effectively with different writing tasks.
- **Skills:** Use systematic sentence combining instruction to develop students' sentence-level skills (e.g., grammar, usage, punctuation) and ability to use different types of sentences when they write. Provide direct instruction to students who are not fluent with writing-related technology (e.g., touch typing, word processing software).
- **Motivation:** Create writing activities that are appropriately challenging, relevant, authentic, extended, and collaborative.

Additionally, because writing is contextually bound, teachers in each content area need to make sure students can write effectively in their particular discipline. In other words, along with helping students become 'generally' good writers, it is essential they also learn to write like historians, scientists, mathematicians, etc. School leaders play a critical role here, as they are often best suited to ensure teachers' goals and efforts are coordinated across content areas and grade levels.

QUESTION:

What school-wide practices should we adopt to help students use writing as a tool for learning?

When middle grades students write about content they read or learn in class, it significantly improves their ability to understand, apply, and retain the information. Writing promotes learning because it provides the opportunity to visibly and permanently record, analyze, connect, and personalize ideas. Therefore, having students use writing as a tool for learning should be a school-wide goal, and all teachers should regularly create and facilitate writing activities that are designed specifically for the purpose of helping students understand content area material.

Four types of writing activities that can be used by all middle grades teachers to promote student learning are: note-taking, summary writing, generating/answering questions in writing, and analytic writing. Illustrative examples of each are provided below.

Note-Taking.

- In health class, students use the Cornell note-taking system while watching a documentary film.
- In English class, students create character maps for the protagonist and antagonist featured in the novel they are reading.

Summary Writing.

- In social studies class, after reading an editorial published in the local newspaper, students write a summary of the main ideas and supporting details.

- In technology class, students create an outline of the key information presented on a website about cyberbullying and then use that framework to write a summary.

Generating/Answering Questions in Writing.

- In math class, before students solve a problem, they respond in writing to questions posed by the teacher (e.g., *What do you think the answer will be?; How did you come up with that estimate?*). After solving the problem, students answer additional questions (e.g., *What method did you use to find your answer, and why did you pick that approach?; Was your initial estimate correct—Why or why not?*).
- In English class, after reading a book chapter, students write—and also answer—two questions they would like to discuss in their literature circles.

Analytic Writing.

- In social studies class, students use what they learned during a field trip to the local historical society to write an essay comparing and contrasting their own childhood experiences with those of children who lived during the 1800s.
- In science class, after students complete a lab on buoyancy, they select two objects from their locker and write a paper explaining why each would sink or float.

One very important point for middle grades teachers to remember is that writing does not automatically enhance students' learning. To be effective, content area writing activities need to be thoughtfully constructed, explicitly taught, and appropriately supported.

QUESTION:

What is the role of assessment with writing, and what assessment practices should we use?

Research clearly documents that assessment is a very important component of an effective middle grades writing program. In terms of specific recommendations for how to assess writing, several practices have been shown to positively impact students' writing achievement and, thus, should be used by all middle grades schools and teachers. Three of these include monitoring students' progress in writing, providing teacher feedback, and teaching students how to self-assess their writing.

Teachers should regularly monitor students' progress towards the writing standards associated with their grade level and content area. This type of formative assessment is important because it provides the information needed to successfully plan, evaluate, and adjust instruction. It also allows for the identification of students who are struggling with writing and need additional assistance, as well as those who are exceeding expectations and would benefit from additional challenges.

One way teachers in all content areas can assess how well students do on individual writing assignments and monitor their writing development over time is with the use of rubrics. Rubrics are criterion-referenced scoring guides that target general characteristics of good writing and/or features of a particular writing genre or task.

Sometimes, it is appropriate for teachers to use an existing rubric, such as 6+1 Traits® (available for free at <http://educationnorthwest.org/traits/traits-rubrics>). Often, however, it is beneficial for teachers to carefully create their own rubrics to ensure direct alignment with the relevant writing standards and specific writing tasks (e.g., historical fiction written in sixth-grade social studies and lab reports written in eighth-grade science).

To complement and supplement the assessment data teachers regularly collect in their classrooms, students' writing progress should also be periodically measured on a school-wide basis using more formal methods, such as a standardized writing test or other validated procedure (e.g., writing curriculum-based measurement).

In addition to monitoring students' progress in writing, middle grades teachers can help students become better writers by providing them with thoughtful feedback about their compositions. Typically, teacher feedback is offered in the form of written comments; however, having discussions with students (commonly called 'writing conferences') can also be very beneficial. Teachers' feedback is most effective when it serves to both motivate and guide students' development as writers.

For example, feedback should consist of both praise for positive aspects of a text and constructive comments that focus on a few prioritized areas for improvement. Indeed, it is not necessary for teachers to spend time identifying every aspect of a paper that could be enhanced—and doing so can actually be counterproductive! Additionally, students should be provided with feedback at multiple points during the composing process, not just after they submit their final draft. Finally, the predominant focus of teachers' feedback should be on the substantive content and features of a text. Comments related to writing conventions and the overall appearance of a paper are best reserved for the editing and publishing stages of the writing process.

The third recommended practice, teaching students how to assess the quality of their own writing, has several benefits. For example, when students identify the strengths and weaknesses of their texts, it facilitates their ability to make revisions. Over time, self-assessment also helps students internalize the characteristics of good writing and promotes a sense of ownership for their work.

Since many middle grades students do not yet systematically evaluate their own writing, teachers need to help them learn how to do so. This is often best done by modeling and scaffolding the process.

For example, using sample compositions, teachers can show students how to evaluate a piece of writing using a rubric and then make the necessary revisions. Once students understand the process of self-assessment, they can apply it to their own writing, with teachers providing support, as needed.

QUESTION:**How can we help students who experience significant difficulties with writing?**

Even when a high-quality and comprehensive writing instruction program is implemented with integrity, some middle grade students will experience significant difficulty learning to write. Therefore, it is essential schools develop a system to effectively identify these students and provide the additional support that is needed.

The assessment practices recommended in Question 3 for monitoring students' progress in writing can be used to identify struggling writers. However, to fully understand a student's level of writing achievement and specific areas of strength and need, additional diagnostic assessment is typically required.

This might include, for example, administering a norm-referenced writing test and carefully examining a portfolio of student writing samples that represent different genres (e.g., narrative, persuasive, expository) and conditions (e.g., timed and untimed, independent and collaborative, handwritten and word-processed). With this additional information, an intervention plan that carefully targets a student's particular difficulties with writing can be developed and implemented. To evaluate the effectiveness of an intervention, writing curriculum-based measurement is often very helpful because it is sensitive to small increments of growth.

Some middle grades students who struggle with writing will require support and interventions that differ notably from what is commonly included in core writing instruction. For example, the use of speech to text software might be necessitated. However, many practices that are recommended for typically-developing writers—such as teaching writing strategies, having students work collaboratively when they write, setting clear and specific writing goals, making word processing the primary medium for writing, and teaching transcription skills—are also beneficial for students with writing difficulties.

What differs is the nature and amount of instruction some students need to acquire the necessary writing knowledge, skills, strategies, and motivation. Specifically, students who struggle with writing require more intensive (e.g., explicit, systematic, and individualized) and extra instruction. Self-Regulated Strategy Development is one example of an evidence-based approach that provides students with this type of support and has been successfully implemented in a variety of middle grades settings.

An example of a collaborative group activity that provides opportunities to practice reading comprehension is Collaborative Strategic Reading (CSR). Comprehension strategies in CSR include previewing text prior to reading, monitoring comprehension while reading by identifying challenging words or concepts, generating the main idea in your own words as you read, and summarizing key ideas after reading. Once students are independently proficient at each of the four comprehension strategies, they move into peer-led groups to practice these same strategies.

It is no small task to place students into well-functioning groups, and it requires thoughtful teacher planning. Groups for CSR should be heterogeneous and include approximately four students, one of whom can serve as a group leader. It is important that teachers

assign students specific roles within a group and provide explicit instruction to teach students how to perform these roles. Group roles can and should be rotated periodically, with all group members eventually performing the task of every role. It is crucial that ELLs and students with learning disabilities be full participants and not relegated to an easier role every time.

SUMMARY

A growing body of research helps us understand what principles and practices are effective for teaching middle grades students to become proficient writers. The question-and-answer segment summarizes key information from the available literature, including several recent meta-analyses. Although there is much more to learn about writing instruction and assessment, the information that currently exists offers educators a solid foundation to build writing programs that promote success for all students.

The Bush Institute's Middle School Matters program worked with Dr. Santangelo, Dr. Graham, and other research experts to find principles and practices supported by the best available research evidence to assist schools in reaching their goals. Areas of research have been compiled in a user-friendly Middle School Matters Field Guide (www.middleschoolinstitute.org) to walk school personnel through an assessment of what they are currently doing and whether this current practice is aligned with what research has shown to be effective. Through this iterative process of data collection and reflection, school personnel are able to develop a plan of action for realizing positive change within their school.

RESOURCES

To learn more about these recommendations, we provide a list of a few resources. The complete reference list is available as part of the Middle School Matters Research Platform.

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Dr. Steve Graham is the Warner Professor in the Division of Educational Leadership and Innovation in Teachers College at Arizona State University. He is the (co)author/editor of many influential books and reports, such as *Handbook of Writing Research*, *Handbook of Learning Disabilities*, *Best Practices in Writing Instruction*, and *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools*, as well as nearly 150 articles. Currently, he is the editor of *Journal of Educational Psychology*. His research background is in learning disabilities, literacy, writing, and self-regulation—specifically, identifying the factors that contribute to writing development and writing difficulties, developing and validating effective instructional procedures for teaching writing, and using technology to enhance writing performance.

