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Middle School Matters Field Guide:

Research-Based Principles, Practices, and Tools

GEORGE W. BUSH INSTITUTE

The Meadows Center
FOR PREVENTING EDUCATIONAL RISK

Preferred Citation

The Meadows Center for Preventing Educational Risk & George W. Bush Institute. (2016). *Middle School Matters field guide: Research-based principles, practices, and tools* (2nd ed.). Austin, TX: Authors.

Introduction to the *Middle School Matters Field Guide,* Second Edition, March 2016

Since the beginning, a key and overriding focus of the George W. Bush Institute's education work has been to ensure that all students reach high school prepared to succeed. The end goal is that all students graduate from high school ready for either college or post-secondary training that leads to a family-sustaining job.

In the summer of 2010, the Institute held two separate working meetings with key, nationally recognized researchers (who also had direct experience working in schools), school practitioners, national and state policy makers and influencers, and other partners with a keen interest in successful graduation.

Two factors became exceptionally clear from these meetings: 1) The importance of the middle grades in achieving these goals was not receiving the attention it deserved, and 2) a large body of high quality research exists on strategies already proven to help middle grades students—yet schools and educators don't use, or know very little about, these strategies.

So, in 2010, the Institute began an endeavor to see how it could support middle schools across the nation, utilizing the best strategies as proven by the highest quality research.

The Institute developed a Strategic Plan, and late that year, a smaller group of sixteen noted researchers convened to begin compiling middle grades practices with strong research evidence of effectiveness. These strategies would be framed in a practical way to be easily understandable for all educators.

The group first identified key areas around which to frame the research, including reading, math, writing, cognitive science, school climate and culture, student behavior supports, and dropout prevention. The researchers then worked with others in the research field, as well as practitioners, to write the *Middle School Matters Field Guide*. As you will see in the field guide, each research-based principle has practices and examples accompanying it to help the practitioner. Throughout the process, educators currently in practice were consulted regarding the clarity and practicality of all aspects of the field guide.

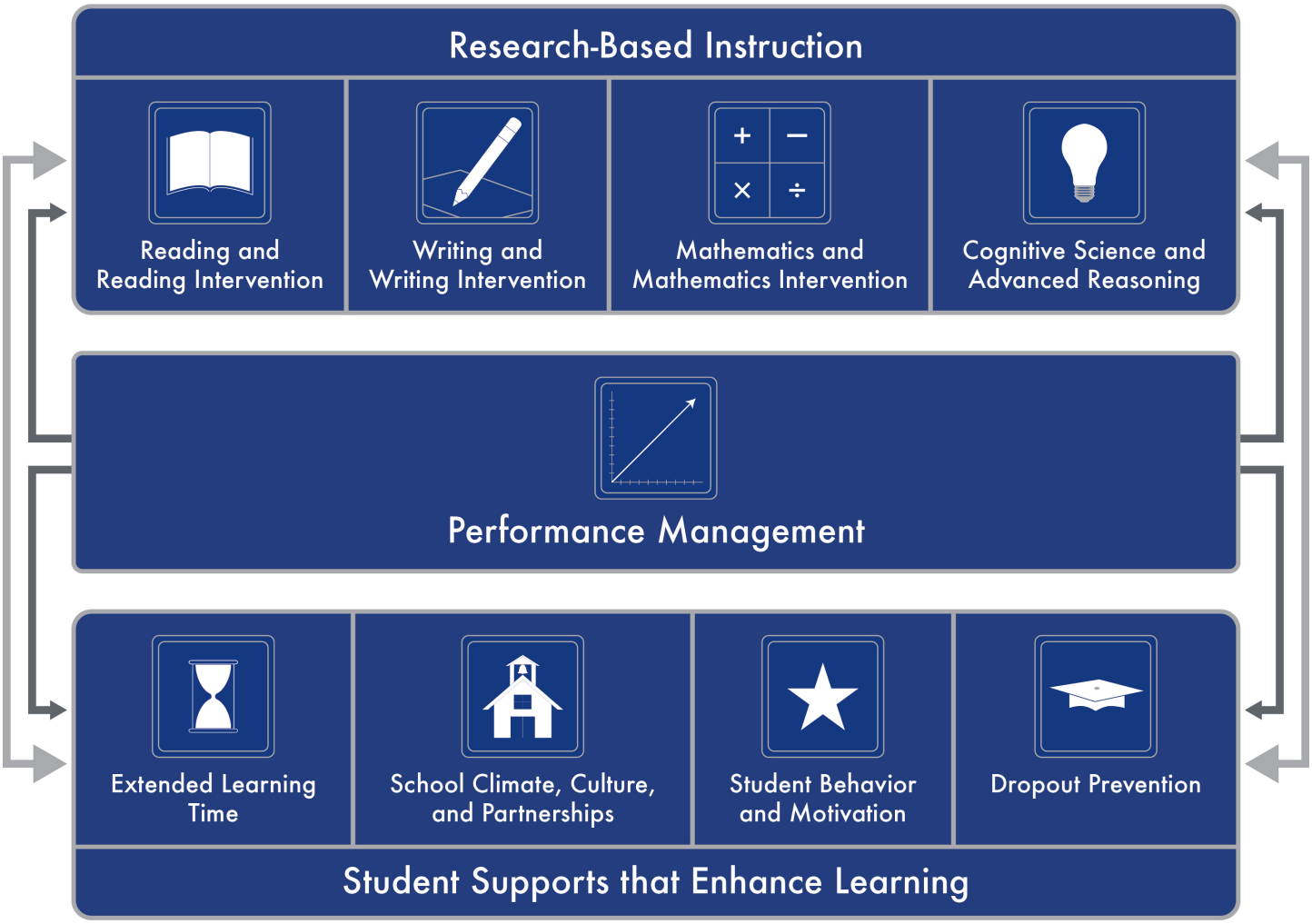
It took nearly two years to compile and edit the field guide and ensure it reflected all existing solid research and presented this research in a highly practical way for educators to use. That guide was used for the beginning years of Middle School Matters.

This version of the *Middle School Matters Field Guide* was updated in 2015 and adds recent high quality research principles. It has also been reorganized to make it even clearer for educator use.

The George W. Bush Institute and its partner, The Meadows Center for Preventing Educational Risk, are proud to have created this body of knowledge for middle grades educators. A compilation of these principles from the highest quality research has never before existed.

Our greatest hope is that school districts, middle schools, and teachers across the country will use this guide and find it to be a solid and helpful foundation for their programs and curriculum and daily practice.

Overview of the *Middle School Matters Field Guide*, Second Edition



We want to thank everyone involved in creating Middle School Matters. The current researchers working on the project are:

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We are most grateful to the many individuals who were involved in past meetings and processes to create the field guide but whose names are too numerous to mention here. Their names can be found on the Middle School Matters website at https://greatmiddleschools.org/resources/field-guide/middle-school-matters-research-platform-content-experts/.

And, finally, we are exceptionally grateful to our funders, who have helped us immeasurably. Their support has allowed us to compile the knowledge and assist middle schools in Texas and beyond in putting this knowledge into everyday practice to improve outcomes for children.

The Brown Foundation, Inc.
The Meadows Foundation
Sid W. Richardson Foundation
Harry W. Bass, Jr. Foundation
IBM
Bill & Melinda Gates Foundation
Bass Foundation
The Bank of America Charitable Foundation, Inc.
Esping Family Foundation
Oceanic Heritage Foundation
Dollar General Literacy Foundation

Additional Resources and Implementation Tools

The Middle School Matters Institute has developed resources and provided support opportunities that align with the research-based principles and practices in the field guide. These resources and toolkits are designed to bridge research to practice and support implementation of research-based strategies.

Resources for School Leaders: Tools to support a school's adoption and implementation of research-based practices (https://greatmiddleschools.org/resources/resources-for-school-leaders/)

Instructional Toolkits: Professional development modules, videos, and instructional materials aligned with specific research-based practices (https://greatmiddleschools.org/toolkits/)

Support Options: A variety of free and customized support options to assist with your implementation of research-based practices at the campus or district levels (https://greatmiddleschools.org/support/)

Visit our website at http://www.GreatMiddleSchools.org

Dear Colleagues,

We are fortunate to participate in this exciting endeavor with the George W. Bush Institute to gather the best available evidence to improve outcomes for middle grades students. The researchers who engaged in this work translated their expertise, knowledge of research, and experience working with teachers and schools into practical strategies that can improve middle grades education. The second edition of the *Middle School Matters Field Guide* is the result of these efforts.

Why is this summary of research necessary? The quality of research in education is uneven, which can make it very difficult for educators to know which research can best help their students. Our team set out to eliminate this guesswork by developing a field guide that makes the best research-based practices, interventions, and strategies easily accessible for middle grades educators.

The hallmark of research quality is design. Poorly designed studies have findings that are plausibly explained by something else. A study that looks at reading test scores of the same students before and after a new reading approach is implemented, for example, cannot separate the gains students achieved from the new approach from the gains they would have achieved from normal growth. Normal growth is, of course, a plausible explanation for the findings. Had the study used a control or comparison group as a benchmark of what would have happened without the new approach, it would have been able to determine that the findings were the result of the new approach. The use of a control or comparison group is fundamental to rigorous research—in fact, it is a defining feature of it.

The value of using research is that it tests (sometimes long-standing) principles and practices and identifies those that are more effective. It shows the direction of travel ("head north") rather than a sequence of directions ("take route 539 for six miles, and then turn left…"). While explicit directions are desirable, knowing the direction of travel is important because of what it is saying *not* to do: in this case, don't go south. It tells educators not to follow the direction of travel of ineffective approaches. For example, despite the multitude of published tests, guidebooks, professional development and workshops for educators focused on the concept of "learning styles," currently, there is no adequate evidence base supporting the incorporation of learning styles into general education practice (Pashler, McDaniel, Rohrer, & Bjork, 2008). The field guide surveys large amounts of research and highlights the directions of travel that emerge for educators to then implement.

Researchers are trained to be skeptical. If a claim is advanced, researchers want to see the evidence for the claim. In this respect, researchers are like attorneys trying to establish guilt or innocence. A prosecutor makes a claim that a defendant committed the crime. The claim is not by itself proof of the crime; the prosecutor needs to put forward evidence supporting the claim. The defense attorney tries to refute the evidence.

Being skeptical in education means a claim that a new curriculum or new approach to teaching reading or math is more effective, for example, has to be supported by evidence. Applying skepticism in the day-to-day classroom means a teacher always asks whether an approach is benefiting students and is open to the possibility that other approaches might benefit them more. The best educators are learners themselves, and their teaching practices reflect that sensibility. This does not mean educators should be reading articles in research journals and attending research conferences on top of the many demands already consuming their time and attention. Other organizations and entities have developed standards for quality research and practices and are reviewing research for educators. For example, the What Works Clearinghouse has reviewed and rated more than 10,000 studies as of this writing.

Effective practices emerging from rigorous research and evidence have been tested and found to improve outcomes more than other practices (or strategies, or policies, or interventions; a variety of terms are used here). It is important to note that effective practices may differ from the latest styles or what was heard at a recent conference or webinar. The challenge for teachers is to take the proven strategies and incorporate them into their own classrooms.

This field guide is designed to help educators do just that. It includes research-based instructional practices, types of activities, expected teacher and student behaviors, specific strategies and tools, and other recommendations supported by research that have shown to be effective in improving student outcomes. The instructional practices highlighted in the field guide are general. They apply to all content areas (including science and social studies) and to all students in grades 6, 7, and 8, including students who are learning English. English learners need to develop fluency in academic vocabulary and language, as do students who are not English learners. Practices that improve literacy for native English speakers also work for English learners.

We appreciate that even the most effective practice from research may yield different results when implemented in school settings. Schools and districts are complex environments, and educators may encounter a variety of barriers or hurdles when implementing a practice. We believe the existence of these barriers and hurdles does not mean evidence and research should be ignored. It is better to start from a research-based practice and tackle implementation issues than to continue to use ineffective practices because they are familiar to educators and students.

Of course, ongoing research has the potential to identify new effective practices for the field guide. The George W. Bush Institute will continue to engage with researchers and practitioners across the country to share the latest rigorous research evidence as part of our commitment to supporting middle grades educators and their students.

Sincerely,

Mark Dynarski (on behalf of the Middle School Matters Researchers)
Fellow, George W. Bush Institute

Reference
Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. Psychological Science in the Public Interest, 9(3), 105-119.