

RESEARCH BASE OVERVIEW

Grounded in inquiry, collaboration, and conversation, the *Patterns of Power* process invites students to explore conventions through author's purpose and craft. This instructional lens allows writers to dwell in the possibility of meaning and effect rather than remain stifled in a limited right-or-wrong approach. This research-based authentic grammar instruction, the foundation of the *Patterns of Power* family of resources, uses literature models to inspire student choice and meaning-making through the practical application of standards.

The *Patterns of Power* process is a set of six invitations focused on a specific grammar learning target that becomes a focus phrase (I-statement): Invitation to Notice, Invitation to Compare and Contrast, Invitation to Imitate, Invitation to Celebrate, Invitation to Apply, and Invitation to Edit.

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"Grammar instruction in the studies reviewed involved the explicit and systematic teaching of the parts of speech and structure of sentences. The meta-analysis found an [negative] effect for this type of instruction for students across the full range of ability. This negative effect ... was statistically significant, indicating that traditional grammar instruction is unlikely to help improve the quality of students' writing. Studies specifically examining the impact of grammar instruction with low-achieving writers also yielded negative results."

Graham, Steve, and Dolores Perin. 2007. *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School.* Washington, DC: Alliance for Excellent Education.

"The grammatical metalanguage is used but it is always explained through examples and patterns; links are always made between the feature introduced and how it might enhance the writing being tackled; the use of imitation: offering model patterns for students to play with and then use in their own writing; the inclusion of activities which encourage talking about language and effects; the use of authentic texts; the use of activities which support students in making choices and being designers of writing; and the encouragement of language play and experimentation."

Myhill, Debra, Helen Lines, and Annabel Watson. Making Meaning with Grammar: A Repertoire of Possibilities. University of Exeter, UK.

"A key for teaching for transfer involves understanding patterns, similarities and differences in the transfer before applying the strategies to a new task. It is learning to detect differences and similarities that is the key that leads to the transfer of learning." John Hattie's research determined identifying similarities and differences had the largest effect size (1.32) of any other strategy.

Hattie, John & Greg Donoghue. 2016. Learning Strategies: A Synthesis and Conceptual Model. npj Science of Learning. 1. 16013. 10.1038/npjscilearn.2016.13.

"I' statements, using a first-person pronoun, do something different and more powerful for the brains of students. They activate the ability of humans to learn by imitation."

Fisher, Douglas, Nancy Frey, and John Hattie. 2017. *Teaching Literacy in the Visible Learning Classroom*. Thousand Oaks, CA: Corwin.

"The order of the process, with the invitational method of instruction, helps create a "safe and social" environment that will set your middle grade students free to explore possibilities, meaning, and purpose."

Anderson, Jeff and Travis Leech. 2021. "Grammar Instruction the Safe and Social Way." MiddleWeb. https://www.middleweb. com/44878/grammar-instruction-the-safe-and-social-way/

"Cognitive structures are the basic mental processes people use to make sense of information. Comparative thinking structures process information by identifying how bits of data are alike and different. Comparative thinking structures are foundational in learning. Students use cognitive structures to process information and creating meaning by (1) making connections, (2) finding patterns, (3) identifying rules, and (4) abstracting principles. All learning is based on relationships; that is something has meaning when compared and

Garner, Betty K. 2007. Getting to Got It! Alexandria, VA: Association for Supervision and Curriculum Development.

"Identifying similarities and differences might be the core of all learning." In many studies, this detection "was accompanied by a great deal of rich discussion and inquiry on the part of the students." There is a strong research base supporting this effectiveness.

Marzano, Robert J., Debra J. Pickering, and Jane E. Pollock. 2001. *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

"When we imitate, our brains rewire to make the new behaviors more permanent."

Dearybury, Jed and Julie Jones, PhD. 2020. The Playful Classroom. Hoboken, NJ: Jossey-Bass.

"[S]tudents writ[e] frequently and fluently using a growing repertoire of skills regarding the conventions of language such as spelling, punctuation, and word choice. These skills are developed through intentional instruction, exposure to other ... writers through reading experiences, ... and time to experiment with the craft of writing by creating original texts that serve many purposes. [W]hen all of these things are interwoven, in intentional ways, students witness their increasing writing prowess."

Fisher, Douglas, Nancy Frey, and John Hattie. 2017. Teaching Literacy in the Visible Learning Classroom. Thousand Oaks, CA: Corwin.

Conversations build our conscious awareness of the world around us. The *Patterns of Power* structure uses this natural, brain-based process to drive effective grammar instruction.

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contrasted with something else."

"A developmental perspective in learning means that the teacher understands that a child's response is not merely "correct" or "incorrect" but rather a reflection of what the child understands at that moment. An important role of the teacher is to foster questions and dialogue among students and create meaningful experiences that allow them to interact with one another. In fact, the benefits of classroom discussion, with an effect size of 0.82, are even stronger than the benefits of direct instruction."

Fisher, Douglas, Nancy Frey, and John Hattie. 2017. *Teaching Literacy in the Visible Learning Classroom*. Thousand Oaks, CA: Corwin.

"Discussion increases students' engagement, helps them take responsibility for their learning, prompts higher-level thinking, offers room for clarification, encourages children to build and share knowledge, and gives them opportunities to apply strategies ... Discussion offers the benefit of being inclusive of students from diverse backgrounds. Previous work has found that discussion increases participation for dual language learners and reading enjoyment for all, (Carrison & Ernst-Salvit 2005), and that conversations enable teachers to publicly value all students' thinking and talk."

Kelly, Laura Beth, Meredith K. Ogden, and Lindsey Moses. 2019. "Collaborative Conversations: Speaking and Listening in the Primary Grades". Young Children. Vol. 74, No. 1.

"Cobb investigated the relationship between peer conversations and academic performance. Findings indicated that the level of attentiveness to classroom activities and engagement in peer conversations about appropriate academic material correlated to performance across subject areas."

Kathy Dyer. 2015. "Research Proof Points – Better Student Engagement Improves Student Learning #Edchat." *Teach. Learn. Grow.*, www.nwea.org/blog/2015/research-proof-points-better-student-engagement-improves-student-learning/.

"Most importantly, teachers need to dedicate time every day for students to engage in collaborative conversations ... Regardless of the specific approach that a teacher takes, students simply must talk in class."

Fisher, Douglas and Nancy Frey. 2020. "Speaking and Listening in Content Area Learning." *Reading Rockets,* www.readingrockets.org/article/speaking-and-listening-content-area-learning.

The *Patterns of Power* process promotes safe learning environments that support the tenets of socialemotional learning in which children are free to take risks, be curious, and be vulnerable when it comes to grammar usage.

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"Negative emotions crush our brain's learning potential, whereas providing the brain with a fear-free environment may reopen the gates of neuronal plasticity. There will be no progress in education without simultaneously considering the emotional and cognitive facets of our brain—in today's cognitive neuroscience, both are considered key ingredients of the learning cocktail."

Dehaene, Stanislas. 2020. How We Learn: Why Brains Learn Better Than Any Machine . . . for Now. New York: Penguin Random House.

"Scientists use the term 'social engagement system' to refer to the set of neural circuits that help us connect openly with others—and even our own inner experience. As a result of receptivity and an active social engagement system, we feel much more capable of addressing challenges in a strong, clear, and flexible way . . . allowing us to absorb, assimilate, and learn new information. [In this state, learners are] more flexible, more open to compromise, and more willing to take chances and explore. They're more curious and imaginative, less worried about making mistakes."

Siegel, Daniel J., and Tina Payne Bryson. 2019. *The Yes Brain: How to Cultivate Courage, Curiosity, and Resilience in Your Child.* New York: Bantam.

"Students who are less stressed are more apt to learn and grow in a space that is safe."

Dearybury, Jed and Julie Jones, PhD. 2020. The Playful Classroom. Hoboken, NJ: Jossey-Bass.

Patterns of Power Family of Research Base Overview

"As described in Deb Dana's *The Polyvagal Theory in Therapy* (2018), the Polyvagal Ladder identifies three states of our nervous system, starting at the bottom in a shutdown or frozen state and rising to the top of the ladder to the safe and social state. The *Patterns of Power* process is an alternative that supports students meeting and exceeding language, grammar, or convention standards through positive play and cultivation of curiosity, connect reading and writing with the bridge of conventions that activate meaning—the 'safe and social' hallmarks of conversation, collaboration, curiosity, and creation."

Anderson, Jeff and Travis Leech. 2021. "Grammar Instruction the Safe and Social Way." MiddleWeb. https://www.middleweb.com/44878/grammar-instruction-the-safe-and-social-way/

The *Patterns of Power* process actively engages writers in student-centered manageable chunks of exploration and play, which raises writers' conscious level of attention to the moves writers make to create meaning: revising and editing.

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"When children feel free enough to play at their work, they are more likely to achieve high levels of success. Play invites inquiry, and inquiry accepts that invitation. In play, kids have the opportunities to linger, to examine, to wonder, to notice, to look closely, to ask why things are the way they are, and to share their thinking ... Inquiry, because it is inherently playful, fosters a perspective on learning that thrives on curiosity, builds on children's strengths, and gives voice to all learners."

Mraz, Kristine, Alison Porcelli, and Cheryl Tyler. 2016. *Purposeful Play: A Teacher's Guide to Igniting Deep and Joyful Learning Across the Day.* Portsmouth, NH: Heinemann.

"Play allows us to make mistakes without high-stakes consequences, thus enhancing learning. The playful classroom includes using time to take a risk and try something new in pedagogy."

Dearybury, Jed and Julie Jones, PhD. 2020. The Playful Classroom. Hoboken, NJ: Jossey-Bass.

"Inquiry activates kids' curiosity, unleashes children's creativity, provides social-emotional learning through teamwork, empathy, and shared responsibility, and makes school feel worthwhile. Students show motivation in class when the work is interesting and worth doing. Given a hundred years of study, we can now document improved academic achievement in a variety of settings and grade levels where inquiry-based approaches are in place."

Daniels, Harvey "Smokey." 2017. The Curious Classroom. Portsmouth, NH: Heinemann.

The *Patterns of Power* process uses effective models to build strong writers through curiosity rather than memorization of abstract terminology. Students explore author's purpose and craft for meaning and effect rather than labeling parts of speech or diagramming sentences.

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NOTE: The *Writing Next* research report found the, "study of Models, which provides students with opportunities to read, analyze, and emulate models of good writing" had a positive effect on student writing.

"Students are encouraged to analyze [notice and discuss] these examples and to emulate [or imitate] the critical elements, patterns, and forms embodied in the models in their own writing. The effects for all six studies reviewed were positive."

Graham, Steve, and Dolores Perin. 2007. Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School. Washington, DC: Alliance for Excellent Education.

"Our research has provided strong evidence for the value of using grammar as a way to help young writers develop understanding of meaning-making resources." When young writers are introduced to what authors do in published literature, we "support writers in taking control and ownership of the texts they compose, making choices which enable them to voice themselves in their writing, and to shape their texts to meet the writer's rhetorical goals."

Myhill, Debra, Helen Lines, and Annabel Watson. *Making Meaning with Grammar: A Repertoire of Possibilities.* University of Exeter, UK.

The *Patterns of Power* process entwines the reading-writing-speaking connection in literacy—their interconnectiveness strengthening and reinforcing all facets, especially grammar.

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Components of effective literacy learning include a reading-writing-speaking connection. "Development of reading and writing proficiency occurs when students have rich reading experiences, opportunities for purposeful writing, and occasions for meaningful interactions with peers and the teacher."

Fisher, Douglas, Nancy Frey, and John Hattie. 2017. *Teaching Literacy in the Visible Learning Classroom*. Thousand Oaks, CA: Corwin.

"Reading and writing are both acts of communication. As students become skilled readers, they notice more than just the content of the text. Readers potentially observe sentence and paragraph structures, variations in pacing, and recurring themes. These observations cause the reader to employ metacognitive skills and try to get inside the writer's head. Similarly, to write effectively, a writer must consider the perspective and needs of the reader."

Rosa, Rona dela. 2021. "The Reading-Writing Connection Is Much Stronger in One Direction Than the Other." *Psychreg*, www.psychreg.org/reading-writing-connection/.

"Research has found that when children read extensively, they become better writers. Reading a variety of genres helps children learn text structures and language that they can then transfer to their own writing."

2010. "The Relationship between Reading and Writing." *Reading Instruction Resources.*, www.k12reader.com/the-relationship-between-reading-and-writing/.

