





Dennis-Yarmouth Regional School District

Instructional Office Newsletter

Leveling the Playing Field for Introverted Students

In this *Mindshift* article, Deborah Farmer Kris says many introverts don't realize that temperament is rooted in genetics, with differences emerging in infancy and early childhood. Schools tend to be highly stimulating environments that favor extroverts, and quieter children frequently hear injunctions like "Just speak up" and "Come out of your shell." All this gives introverts a sense that there's something wrong with them, and they can feel "overlooked, undervalued, and overstimulated," says Heidi Kasevich, director of education for Quiet Revolution, which grew out of Susan Cain's best-selling book about introverts.

What can teachers do to give introverted students a fair shake? Kris suggests administering a survey at the beginning of the school year to identify who those students are and then structuring classes to allow all students to excel. Specifically:

- Make space for quiet reflection. Teachers can take stock of the amount of time they give to active discourse versus silent reflection and individual work. If the balance is more toward the former, teachers might build in:
 - Opportunities for one-to-one conversations like think-pair-share;
 - Asking students to respond to questions by jotting ideas on a sticky note before speaking;
 - Using "one-minute papers" mid-class for students to reflect on what they're learning – posing questions like, What's challenging me? Why is this relevant? How can I connect this to something else I'm learning?
 - Counting to ten before calling on students; this ups the complexity of responses from all students and is especially helpful to introverts.

(Continued on page 2)

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IMPORTANT DATES WELCOME TO THE NEW YEAR---2019

January 1	New Year's Day
January 2	School Resumes
January 18	Teacher Professional Day
	Thesaurus Day
January 21	Martin Luther King, Jr. Day
January 21 January 24	Martin Luther King, Jr. Day Compliment Day

IMPORTANT NOTICE:



Central office is a fragrance-free zone so please be respectful and plan accordingly when you visit.

Due to one of our members at the office, being highly sensitive to any type of fragrance, we ask that staff visiting/meeting at the Administration building please refrain from using any scented products.

Fragrances from personal care products, air fresheners, laundry and other cleaning products have been associated with adversely affecting a person's health. We ask that we all work together to make the environment a safe and healthy workplace for everyone.

Thank you very much for your cooperation!











(Continued from page 1)

 Asking for purposeful silence as students consider an image, a painting, or a passage from a book.

All this helps because introverted students do better conversing in small groups, thinking before sharing aloud, weighing options before making decisions, assessing risk before acting, and recharging in a quiet, calm environment.

- Consider the physical environment. "Think about providing niches for quiet reading or mindwandering," suggests Kris. "Explore inclusive lunchroom and playground options, such as a coloring table or open library time."
- Provide context and previews. Abrupt demands and unexpected challenges can be jarring to introverted students, so teachers might consider ways of giving them a longer runway:
 - In elementary classrooms, a posted daily schedule;
 - In secondary classrooms, a display of the sequence of curriculum units for the year;
 - An essential question on the board as class starts;
 - An agenda before a meeting;
 - A thorough preview of a unit, project, or assessment.
- Be sensitive to language. Feedback to students or their parents can convey negative judgments about introverted students – for example, "He needs to speak up more in class discussions." This comment might be reframed to emphasize strengths: "He is an insightful student who thinks deeply and thoughtfully before responding."
- Stretch the comfort zone. The trick is tying actions the student wants or needs to take to the student's passions and interests for example, an introverted high-school student who is interested in sustainability might be encouraged to become a club officer or give a speech. "Keep your mission in mind," the teacher



might say to the student prior to the speech. "Go to the auditorium beforehand to practice, and remember a time when you spoke with confidence and conviction."

o Build in inclusive group work. "If you simply put

kids into groups with no training, a minority of members will likely do the majority of the talking," says Kris. "Train students in techniques such as brainwriting and design thinking. Establish group norms for inclusive conversation and stick to them."

"Six Strategies to Help Introverts Thrive at School and Feel Understood" by Deborah Farmer Kris in *Mindshift*, August 12, 2018,

https://www.kqed.org/mindshift/51811/sixstrategies-to-help-introverts-thrive-at-school-andfeel-understood

Getting Students Writing Across the Disciplines

(Originally titled "Three Rules for Writing-Rich Disciplinary Classrooms")

In this *Education Update* article, Rick Coppola (a Chicago Public Schools teacher) and Becca Woodard (University of Illinois/Chicago) say that writing is an essential life skill, but it is often "locked out" of the curriculum because it's time-consuming for students to produce and for teachers to grade. That's a shame, say Coppola and Woodard, because "When students write, they have opportunities to articulate, revise, and strengthen their ideas, as well as to present and communicate their thinking." Here are their suggestions for getting more students writing across subject areas:

• A broader audience – Most writing in school is for the teacher, which often means authentic purpose takes a back seat to getting a good grade. Better to extend the audience to peers, families, the school, and online communities.

• Informal writing – Coppola and Woodard recommend exploratory writing – regular, daily writing tasks that students share with peers to investigate a problem, raise questions, work out meaning, or engage in reflection. These written explorations naturally draw on prior knowledge and cultivate investment in curriculum goals.

• Ambitious topics – Coppola and Woodard encourage cross-disciplinary themes for writing – cause and effect, patterns, change, structures, systems. A possible topic in mathematics, *What patterns exist in your everyday life and how do they help you make sense of your world?* In science, *why should we recognize universal patterns that exist in the natural world?*











• More time in the sausage factory – Most authors admit that their first drafts aren't very good; it takes lots of revision and editing to produce something decent. "And yet, in schools, we often expect students to produce quickly written presentational writing," say Coppola and Woodard. "They get one shot to showcase their understanding, often without opportunities to talk with others, receive feedback, or revise their ideas." Students need sustained blocks of time, as well as working in writing groups with classmates, to do the thinking and get the appreciation and feedback they need to write well. It's also important that some of the feedback is not graded and is focused on ideas and content, not grammar and spelling.

• Leveraging digital spaces and tools – Coppola and Woodard have found that digital platforms are very helpful for managing and keeping track of students' writing. **Google Docs** is good for long-term writing and collaborative projects because, among other things, it keeps track of each version. **Blogger** is helpful for showcasing and sharing presentational writing for wider audiences. Working in digital environments also encourages students to compose multimodally – considering "how words, images, and sounds work together to create and shape meaning."

In a sidebar, the authors share examples of disciplinary goals, practices, and writing in several subject areas. Here are the items for science:

- A goal: Investigate and explain the natural world through developing and advancing scientific theories.
- Valued disciplinary practices: Asking questions; defining problems; conducting investigations.
- Characteristics of writing in this discipline:
 Communicates what and why something was done, what was found out, and the meaning behind it.

"Three Rules for Writing-Rich Disciplinary Classrooms" by Rick Coppola and Becca Woodard in *Education Update*, June 2018 (Vol. 60, #6, p. 2-3, 6-7), <u>https://bit.ly/2Ql259i</u> (available for purchase for non-ASCD members)

Solving Some Glitches with Student-Led Discussions

In this article in Edutopia, New Jersey

curriculum supervisor Mark Wise says the goal in Socratic seminars, Harkness classes, and fishbowl discussions is getting students to sustain academic discourse independent of the teacher. "While they have many benefits," says Wise, "student-led discussions often create unintended consequences that inhibit their effectiveness." Here is his analysis of problems and his suggestions for improving the quality and long-range impact of these discussions:

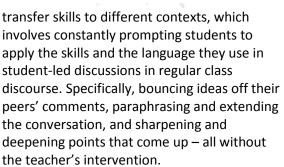
- Uneven student engagement Some students are more intellectually engaged and speak more than others, especially in groups of 10-15 students. Break students into smaller groups, suggests Wise, "increasing the intellectual 'surface area' and the expectation and accountability for active engagement for each individual."
- Assessment challenges If grading is based on frequency of student comments and specific references to the text, the teacher will be furiously taking notes to keep track. "These grading criteria also tend to inhibit the natural flow of conversation," says Wise, "resulting in a series of independent comments rather than dialogue, as students vie for a particular grade." One solution: redefine the criteria for success, perhaps gathering evidence of preparation and conducting a post-discussion reflection, with a premium on responsive listening, thoughtful contributions, and reflection.
- An uneven playing field Most students haven't been taught how to engage in an academic discussion, which gives an unfair advantage to students who have that skill. The solution is explicitly teaching the skills of being an active listener, a thoughtful contributor, and a skillful synthesizer.
- Failure to transfer Wise has found that the student-led dynamic often doesn't get carried over to everyday classroom discussions. "When students aren't organized into these formalized groups," he says, "they often automatically fall back into filtering their questions and comments through the teacher, and the teacher may resume the role of primary facilitator, with the verbally confident students dominating the conversation." The solution: explicitly teaching students how to











"Improving Student-Led Discussions" by Mark Wise in Edutopia, April 24, 2018, https://www.edutopia.org/article/improvingstudent-led-discussions

Better Ways for Students to Solve Math Word Problems

In this article in *Teaching Exceptional Children*, Sarah Powell (University of Texas/ Austin) and Lynn

Max and Rosa picked cherries.

They ate 18 cherries for lunch.

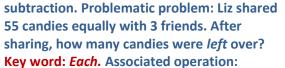
Rosa ate 6 more cherries after lunch.

How many cherries did Max and Rosa eat?

Fuchs (Vanderbilt University) note that many teachers tell students to solve math word problems by telling them to watch for key words (*more, altogether, share, twice*) to decide which operation to use,

or having students practice with one operation at a time ("Today we're doing subtraction word problems"). There is no research evidence that either of these approaches works for students with learning disabilities, say Powell and Fuchs, and there are problems using them with any students. Here are examples of where the key word strategy fails because students seize on the key word without grasping what the problem is really about:

- Key word: Altogether. Associated operation: addition. Problematic problem: Alice bought 4 cartons of eggs with 12 eggs in each carton. How many eggs does Alice have altogether?
- Key word: More. Associated operation: addition. Problematic problem: Colin has some crayons. Then, he bought 12 more crayons. Now, he has 90 crayons. How many crayons did Colin have to start with?
- Key word: Fewer. Associated operation: subtraction. Problematic problem: Paulo picked apples. Zach picked 12 fewer apples. If Zach picked 20 apples, how many apples did Paulo pick?
- **Key word:** *Left.* Associated operation:



- multiplication. Problematic problem: Miles has 3 trays of building blocks with the same number of blocks on each tray. If Miles has 75 blocks altogether, how many were on *each* tray?
- Key word: Double. Associated operation: multiplication. Problematic problem: Margaret bought double the songs as her sister. If Margaret bought 12 songs, how many songs did her sister buy?
- Key word: Share. Associated operation: division. Problematic problem: Sal collected 18 quarters to share equally among his friends. After sharing, he had 3 quarters

remaining. How many quarters did Sal share?

➢ Key word: Divide. Associated operation: division. Problematic problem: Cam divided 5 pieces of paper into fourths. How many pieces of paper does Cam have now?

Powell and Fuchs recommend two alternative strategies, which they say are especially effective for students with special needs:

 Attack strategies – Give students a general plan for processing and solving word problems. Here are some possible formulas, the first four using acronyms:

FOPS: Find the problem. Organize information using a diagram. Plan to solve the problem. Solve the problem.

RUN: Read the problem. Underline the question. Name the problem type.

DOTS: Detect the problem type. Organize the information using the conceptual model diagram. Transform the diagram into a math equation. Solve for the unknown quantity and check your answer.

STAR: Search the word problem. Translate the words into an equation or picture. Answer the problem. Review the solution. Montague (2008):

- Read for understanding.
- Paraphrase in your own words.
- Visualize, using a picture or diagram











- Hypothesize, making a plan to solve the problem.
- Estimate, predicting the answer.
- Compute do the arithmetic.
- Check to make sure everything is right.

Whichever attack strategy is used, it's essential that the teacher models it while explaining how it works, scaffolds student mastery by decreasing levels of support, and gives students plenty of practice with corrective feedback.

Schema instruction – Students categorize word problems within problem types, applying an efficient solution strategy for each schema. There are three additive schemas – combining, comparing, or changing – and three multiplicative schemas – equal groups, comparison, and proportions or ratios. Schema instruction requires much more instructional time than the attack strategies, perhaps spanning an entire school year, and there needs to be an explicit focus on how key vocabulary words are used in math problems. Schema strategies are especially helpful with multistep word problems, say Powell and Fuchs.

"Effective Word-Problem Instruction: Using Schemas to Facilitate Mathematical Reasoning" by Sarah Powell and Lynn Fuchs in *Teaching Exceptional Children*, September/October 2018 (Vol. 51, #1, p. 31-42), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC613 0842/; Powell can be reached at srpowell@austin.utexas.edu.

Six Pointers for Rookie Teachers . . . But Good Practice for Veterans

(Originally titled "Tips for New Teachers: Avoiding the Siren Calls")

"Teaching is one of the only professions in which new hires bear the full responsibilities of the profession beginning on their first day on the job," say New Jersey educators Mark Wise and Beth Pandolpho in this *ASCD Inservice* article. Here are their suggestions on how new teachers can avoid "siren calls" that might lure them to ineffective practices:

 First things first – avoiding the compulsion to "cover" everything in the curriculum. Like a movie director, teachers must make choices on which elements will move the story (learning) forward and which need to be cut. When planning lessons, teachers need to put in the essential elements (the "big rocks") first, making it easier to make on-thefly decisions about what to abandon or shorten.

- Choose the right format or strategy avoiding faddish practices that don't fit the situation. Teachers can have students sit in rows, groups, a circle, or a fishbowl. They can lecture, stage a debate, have students think/pair/share, or rotate through stations. And they have many options with technology. The question is not what's coolest, but what is best for the learning objective.
- Circulate with a purpose avoiding the tendency to walk around monitoring compliance. The right questions in the teacher's mind: What am I looking for? What am I listening for? What is the evidence? What will I do if I don't see it? Is this a time for an all-class mini-discussion? All those questions lead back to the planning objective: How can I make students' thinking visible quickly and efficiently so I know if they are "getting it?"
- Check the understanding of the whole class not calling on only the students who raise their hands. Teachers should use systems that accurately assess all students' learning in real time so as to reveal misconceptions and errors and make good decisions on immediate next steps.
- Produce mental sweat not doing the heavy lifting for students. "We want our students to succeed," say Wise and Pandolpho, "but when we over-scaffold, even with the best intentions, we are not doing our students any favors." It's not enough to teach students how to "do school;" to be prepared for college and life, students need to work hard, make mistakes, get feedback, fix problems, and become autonomous learners.
- Allow time for reflection avoiding the pressure to "move on." Especially in middle and high schools, students traipse from class to class with little time to consolidate what they're taking in. They need time and space to jot answers to bigpicture learning questions, followed by smallgroup discussions: What new information did I learn? How does this connect to what I already know? What questions do I still have?

"Tips for New Teachers: Avoiding the Siren Calls" by Mark Wise and Beth Pandolpho in *ASCD Inservice*, August 16, 2018, <u>https://bit.ly/2BhiJ6g</u>; Wise can be reached at <u>Mark.Wise@ww-p.org</u>.

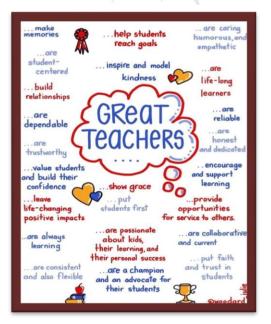












Supporting Students As They Read Texts above Their Level

In this article in *The Reading Teacher*, John Strong and Steven Amendum (University of Delaware/Newark) and Kristin Conradi Smith (College of William and Mary) address the conundrum many teachers are currently facing: (a) new state standards (following the Common Core) say that all students should spend more time reading grade-level texts; but (b) it's long been accepted that having students read at a frustration level is not a good idea. "Teachers often ask us how students should be expected to read texts that are well above their reading levels," say Strong, Amendum, and Smith.

"Initially, we agreed that the use of difficult texts was problematic and, at minimum, needed to be investigated further," they say. "Yet, over time, we were convinced of the potential benefits of increasing text difficulty." Here are the arguments that swayed them:

- Each student's instructional level is not static; rather, it's "elastic" depending on how much instructional support is provided.
- Reading challenging texts can motivate students to apply additional effort and stretch their instructional level.
- What can be read successfully depends on the student's developmental stage, the instructional context, and the nature of the text itself (vocabulary, background knowledge required,

register, figurative language, clarity, idea density, organization, text features and graphics, and genre familiarity).

All this got Strong, Amendum, and Smith thinking about the kinds of support that would be helpful to teachers as their students work with challenging texts. Their ideas:

- Selecting texts Teachers should be guided by quantitative and qualitative measures of text difficulty – Lexile, Fountas-Pinnell, or other readability scales – as well as students' interests and background knowledge, with an eye to getting students moving up the ladder of text difficulty (with appropriate support).
- Choosing tasks and questions Teachers need to make good choices on what they ask students to do and how to query them on texts. "Put simply," say Strong, Amendum, and Smith, "complex tasks can make comprehending a simple text more difficult, and simple tasks can make comprehending a complex text less difficult... Because inferential questions pose more-difficult cognitive targets than literal-level questions, asking text-dependent questions that move from literal to inferential levels of meaning might make reading complex texts less difficult for students."
- Sequencing texts The authors recommend starting with shorter and simpler texts on a topic or theme and gradually introducing more-difficult texts on the same subject, with lots of interactive read-alouds, discussion, and vocabulary building along the way.
- Grouping students Teachers might use classroom-based assessments of decoding, fluency, and comprehension to group students based on instructional needs, then differentiate instruction using, for example, echo reading, choral reading, teacher modeling, think-aloud, partner reading, close reading and annotation of main ideas, circling confusing words, taking notes in the margins, and having whole-class discussions.

"Supporting Elementary Students' Reading of Difficult Texts" by John Strong, Steven Amendum, and Kristin Conradi Smith in *The Reading Teacher*, September/October 2018 (Vol. 72, #2, p. 201-212), https://ila.onlinelibrary.wiley.com/doi/abs/10.1002/t rtr.1702; the authors can be reached at jzstrong@udel.edu, amendum@udel.edu, and conradi@wm.edu.



