Dennis-Yarmouth Regional School District

Office of Instruction Newsletter

May 2024

What's Inside

Important Dates

May 1	May Day
May 5	Orthodox Easter Cinco de Mayo
May 7	Teacher Appreciation Day
May 12	Mother's Day
May 18	Armed Forces Day
May 22	1.5 Early Release
May 27	No School- Memorial Day

May (22 days)

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

First and last days of school
Holiday/Vacation - no school
Tea. Prof. Day - no school
1/2 day of sch. - students
1.5 hr. early rel. students

Three Essential Elements in High-Quality Math Instruction

"The nation is in a math crisis, worsened by the pandemic," say Lynne Munson and Nell McAnelly (Great Minds) in this *Kappan* article. "Our kids can't afford to lose any more ground in math." On the 2022 NAEP assessment, only a third of 4th graders and a quarter of 8th graders scored proficient and above. To do better, say Munson and McAnelly, it's essential that all students get math instruction that has these three components:

• *Coherence across the grades* – "We always smile when we're visiting classrooms and hear teachers start a sentence with the phrase, 'Remember when we learned…,'" say the authors – for example, connecting addition and multiplication in elementary school and ratio and rate to whole number multiplication in middle school, and using consistent strategies and models over time. "It's not enough for teachers to be experts in the grade level they teach," they continue. "They need a solid understanding of the math content that precedes and follows their grade… and collaborate with colleagues within and across grades."

• *Deep conceptual understanding* – "Kids need to understand the reason math works and why a math idea is important," say Munson and McAnelly. They also need to be fluent with math facts and procedures so they can do them quickly and efficiently, "which frees up working memory to engage in more complex thinking and problem solving."

• *Application in school and beyond* – Discussing and engaging in real-world uses of math – calculating batting averages, measuring distances, making scale drawings, counting change – gives meaning and context to classroom math.

"It's Time to Come Together Around Good Math Instruction" by Lynne Munson and Nell McAnelly in *Kappan*, April 2024 (Vol. 105, #7, pp. 64-65)

How Five Classroom Myths Can Be Tweaked for Positive Impact

In this *Edutopia* article, Stephen Merrill and Daniel Leonard describe five common teaching-learning misconceptions and explore the "nugget of wisdom" each contains:

• *Myth #1: Doodling improves focus and learning*. Studies have shown that when students idly sketch geometric patterns or cartoon characters while listening to a teacher, they are less focused and academic outcomes suffer. That's

because doodling is more cognitively demanding than we think, say Merrill and Leonard: “Because our ability to process information is finite, drawing and learning about different things at the same time is a simple question of too much.”

But “task-oriented drawing” – for example, making representational drawings about cell structure in a biology class – can be very helpful. Students don’t have to be proficient artists to reap academic benefits, especially if they annotate their sketches and describe them to someone else.

• *Myth #2: Round robin reading improves fluency*. Students seem attentive while the teacher has one student after another read aloud, but a 2012 study found “no research evidence” that it contributes to students’ fluency or reading comprehension. Oral reading can also stigmatize students who have difficulty reading, while exposing their classmates to mediocre or poor models of oral reading. In addition, in a class using round robin reading, individual students get very little practice.

But oral reading *is* helpful, and students can get useful practice if the teacher has students pair up and take turns reading aloud to a partner and discussing comprehension questions. This can be especially productive if the teacher circulates to monitor accuracy and focus. Choral reading – the whole class reading aloud together – or echo reading – the class mimicking the teacher reading phrases with expression and fluency – can also boost reading proficiency.

• *Myth #3: Talent beats persistence*. Many teachers believe that students who display natural talent are more able than those who need to work hard to achieve the same level of proficiency. That’s also true of bosses’ assessment of their employees. But “scientific research,” say Merrill and Leonard, “reveals that true expertise is mainly the product of years of intense practice and dedicated coaching.” Teachers need to make this point when they talk with students about talent and effort: “All kids – even the ones who already excel in a discipline – benefit when teachers emphasize the importance of effort, perseverance, and growth.” It’s good for teachers to model their own stumbling and persistent effort to compose a piece of writing on the board.

• *Myth #4: Background music undermines learning*. This is true if the music has lyrics unrelated to what the student is studying. That uses some of the same neural circuitry that’s needed to attend to an academic task, thus overloading attention and detracting from comprehension. Distraction also occurs if there are dramatic changes in a song’s rhythm or when there’s a transition from one piece of music to another.

But studies show that in certain conditions, music can boost learning. A catchy melody can improve a student’s mood, motivation, and concentration. With academic tasks that aren’t too demanding, and with instrumental versus vocal music, the net effect can be positive. However, with intellectually challenging work, says Daniel Willingham, “the distraction is probably going to make music a negative overall.”

• *Myth #5: Grades motivate students to do their best work*. Not true, according to numerous studies. In fact, getting A-B-C-D-F grades can have a negative effect on student motivation and achievement. What does help is teachers' comments and specific, actionable suggestions. Most schools require teachers to give grades, and Merrill and Leonard suggest several ways teachers can mitigate the negative effects:

- Holding off on giving grades for students' work until the end of a unit, while giving personalized comments along the way;
- Allowing students to retake assessments;
- Letting students drop their lowest grade;
- Giving students the option of turning in their best work for a series of related assignments.

"5 Popular Beliefs That Aren't Backed by Research" by Stephen Merrill and Daniel Leonard in *Edutopia*, March 29, 2024

Timothy Shanahan on Directed (a.k.a Guided) Reading

In this online article, Timothy Shanahan (University of Illinois/Chicago) answers a teacher's query on whether guided reading is supported by research. Shanahan says he prefers the term *directed reading* because it's not associated with a specific publisher or "brand." He defines it as the teacher working with students as they read the same passage together, either in small groups or as a class. "The point," he says, "is to practice reading under the vigilant watch of a teacher, who provides guidance and support to ensure success." In an overall literacy program consisting of word knowledge, fluency, comprehension, and writing, Shanahan believes directed reading fits under comprehension.

Is directed reading effective? That depends on how it's implemented, says Shanahan. He suggests how the five components of a typical directed reading lesson can have maximum impact:

• *Pre-teaching new vocabulary* – Shanahan believes only the most difficult and esoteric words should be taught before diving into a passage. "A big part of successful reading depends upon dealing with unknown words," he says. "That is part of the reading process… It is important to remember that the purpose of directed reading isn't to guarantee high comprehension on an initial read. We are trying to teach students to read and to read better. If they are always taking on texts that the teacher guarantees will be comprehended immediately and with minimum effort, we aren't really teaching reading – just watching kids practicing."

• *Setting a purpose* – Shanahan disagrees with asking students to read for narrow look-fors – for example, "Find out what happens at Janie's birthday party." Students might locate the answer to that question but ignore other information or fail to grasp the overall meaning of the passage. He believes it's better for students to read with a general purpose – looking for what happens next in the story, or being able to summarize it – which is more like the way proficient readers tackle an article or book chapter. "Be vague here, rather than specific," he advises.

• *Oral reading of text segments* – "When students are starting out, they need to read aloud," says Shanahan. "This is true in kindergarten and for at least a part of grade 1 for most kids." But by the time they're reading at a high first-grade level, they need to start reading silently. Many teachers avoid this in an effort to keep tabs on reading comprehension, engaging their students in round robin reading. But "how are they going to get good at silent reading comprehension if never asked to do such reading with a vigilant teacher close by?" asks Shanahan. Students need practice reading silently – with sentences and short paragraphs at first, perhaps using whisper or mumble reading – then stretching out the length of silent reading time.

• *Questions and discussion* – The benefits of the teacher asking specific comprehension questions after students read a passage "tend to be tiny," says Shanahan. "I would much rather have the teacher ask questions aimed at identifying whether students comprehend the text well and, if not, where things went wrong." *What's important to remember? Which words? Where did you need background knowledge to understand the text?* If students can't answer questions like these, the teacher needs to take them back to the text, often orally, to figure it out. And it's important not to let these questions be answered by a few eager students with their hands up. Shanahan strongly encourages the use of whiteboards, notebooks, or electronic ways to see what everyone knows.

"By the end of these lessons," he says, "the student should have a fair understanding of the text – even though they may not have started that way – and the teaching should have helped the student to understand better the actions that may be needed to ensure comprehension."

• *Oral reading practice* – The problem with the way reading aloud is handled in many classrooms, says Shanahan, is that teachers use easier passages that students can read fluently without too many errors. Students need to be stretched to work with harder texts – with support from the teacher and others. The right kind of oral practice, he says, "can transform many supposedly frustration level texts into instruction level ones that students can take on successfully. That fluency work can be done in pairs, through echo reading, chorally, at home with cooperative parents, or even with a recording device."

"Does Research Support 'Guided Reading'? Practical Advice on Directing Reading" by Timothy Shanahan in *Shanahan on Literacy*, April 6, 2024; Shanahan can be reached at shanahan@uic.edu.

In-the-Moment Feedback on Students' Writing

"Formative assessment and the feedback resulting from it are essential to good writing," says Steve Graham (Arizona State University) in this *Literacy Today* article. "Even the loss of a single letter can radically change the meaning of what a student intended to write, as is evidenced by 'Pavlov studied the salvation of dogs.'"

Formative assessment compares students' writing to "a desired, expected, or idealized version of writing," he says, most often resulting in individual feedback to students. But the insights can also be used by the teacher to decide on lessons to target a specific area of need – run-on sentences, for example – or to speed up instruction if students are moving along more quickly than anticipated.

Graham has these suggestions on formative assessment of student writing, based on research, theory, and practice:

• Less me and more *we* – If feedback is a one-way street from teacher to student, it's unlikely to be effective. Teachers' comments need to be useful, clear, and understandable, taking into account the characteristics of each student. A teacher's feedback is sometimes off-base and students need to feel empowered to correct the misunderstanding. Ideally students aren't just passive recipients but always reaching out for ways to improve.

• More than one flavor – A teacher's comments on students' writing can take a number of forms, including:

- Feed-up – *Your paper has all the prescribed parts of a story*.
- Feed-back – *I underlined any sentence I didn't understand*.
- Feed-forward – *If you add more evidence to support your first point, your argument will be stronger*.
- Side-shadowing feedback – *How might a different character interpret these events?*

A teacher's comments might also be aimed at the processes a student used to create a text and their underlying beliefs, knowledge, and emotions.

• Secrets to success – "Effective feedback is specific, clear, non-judgmental, and in language students understand," says Graham. It's most effective when it's timely and accompanied by concrete examples, explanations, and models of good writing.

• Celebrations – Feedback should honor students' accomplishments and encourage them to keep doing high-quality work.

• A Goldilocks amount – Too much feedback can be debilitating "and send a negative message about a youngster's writing capabilities," says Graham. "Writing develops over time. Each paper does not have to be perfect."

• Connecting past and present – It's helpful to remember the feedback on previous writing, acknowledging progress and addressing persistent issues.

• Times for whole-class instruction – Some writing problems need to be addressed in targeted lessons for all students.

"Formative Assessment and Writing" by Steve Graham in *Literacy Today*, April/May/June 2024 (Vol. 41, #4, pp. 72-73); Graham can be reached at steve.graham@asu.edu.

Getting Middle and High School Students With Low Grades Back on Track

---

By sitting down with students and laying out just what they need to do to pass, teachers can give them the tools to succeed, by Christine Boatman

Nearly every high school teacher knows the end-of-the-semester scramble. During the last couple of weeks of the term, students scurry to finish last-minute assignments and complete test retakes, and teachers are buried in grading.

In an ideal world, this scramble to pass classes wouldn't occur; however, research shows that 53 percent of modern high school students consider themselves to be "frequent procrastinators." Research points to teenage procrastination being strongly correlated to the underdeveloped executive functioning skills caused by the still-developing prefrontal cortexes of teenagers' brains.

An Antidote to Procrastination

There are effective preventive measures that teachers can take to support middle and high school students with time-management and organizational skills. Still, some students inevitably may find themselves behind at the end of the semester and need individualized Tier 2 interventions as a result of their procrastination.

A Tier 2 strategy that teachers can use to support student efforts to pass classes during the end-of-the-semester scramble is the creation of individual PDSA (plan, do, study, act) cycles. A PDSA cycle is a process in which teachers and students work together to create a *plan* for improvement; implement, or *do*, the plan; *study* if the plan's actions were successful; and *act* to create long-term improvement actions based on the results of the plan.

In PDSA cycles, teachers work with their students to create plans for success. These plans can be used either with a whole group or on an individual basis. Through working one-on-one with students this way, I've seen large gains in student achievement and agency.

In January as the end of the semester was nearing, I knew I needed to make a plan to support my students who were not on track to pass my class. With four weeks until it was time to make report cards, I closely audited my grade book and made a list of all of my students (29) who were currently not on track to pass my government and world history classes.

The Research Is In

Get a first look at our new newsletter—a monthly roundup of education research curated by our editors, and presented in a way that's clear, concise, and practical.

A Simple, Practical Approach

For each of these students, I got a piece of paper, wrote the student's name and PDSA at the top of it, and made four quadrants, labeled with *plan*, *do*, *study*, and *act*. Then, over the next couple of days, I met with each of these students individually. We sat down and had an honest conversation about the student's current non-passing status. These meetings, which took no longer than five minutes, happened during regular class time while their classmates were working independently on another task.

Together, we analyzed the student's grade book page and created a plan for how we could work together to help them experience academic success. On the piece of paper, in the *plan* quadrant, we wrote down what exact actions the student needed to take and what actions I as the teacher would take to help them.

These are examples of specific actions we listed:

- "William will look at feedback Mrs. Boatman provided on his World War I essay and revise and resubmit it by January 15."
- "Emma will come in after school on Thursday, January 11, to give her Bill of Rights presentation."
- "By the end of today, Mrs. Boatman will email Jose the directions for the World War I essay."
- "Mrs. Boatman and Maddie will meet on Friday morning and review the process for writing thesis statements together."

As I worked with students to create these individualized plans, there was a look of relief on many of their faces as they realized it was possible for them to complete a few specific actions and pass the class.

Over the next week, students got to work, taking these plans seriously and beginning to implement the actions listed.

After making the initial plans, students were held accountable. I prioritized meeting with each of them weekly. During these meetings, I got out the PDSA plan and together we filled in the study quadrant of the paper, charting the student's current grade and their progress toward passing the course. Many students moved from a strong likelihood of not passing to success in just a couple of weeks.

Positive Results

As I calculated grades at the end of the semester, out of the 29 students I had started individual PDSAs with four weeks prior, 25 moved from not passing to passing. The day when grades came out, one of them came up to me and said, "I didn't pass any of my other core classes, but I passed World History because you cared enough to take the time to show me exactly what I needed to do to be successful, and you kept me on track by meeting with me every week."

After grades came out, at the start of the second semester, I met with each of the 29 students again individually. Together, we filled in the act section of the PDSAs. We wrote specific actions the students could take to hopefully not find themselves in the same situation again—students were very reflective, listing things like the following:

- "Take teacher feedback on assessments more seriously."
- "Don't procrastinate on writing essays."
- "Make sure I am checking in with my teacher about work when I am absent."

Students kept the lists they made, and moving forward, I watched them make a concerted effort to implement the things they had listed.

While student procrastination and end-of-the-semester scrambles are not ideal, if framed correctly, they can be a great opportunity for students to learn life skills and gain ownership over their own learning.

Building Young Students' Working Memory Through Theater Games

---

By remembering the information necessary to play certain games, students develop skills that lead to academic success, by Jocelyn Greene (April 4, 2024)

"Turn in your homework, get out your book, and come to the rug." Seems simple enough. However, anytime students need to follow multi-step directions and keep information in mind long enough to accomplish a task, we are actually asking them to use a complex form of cognitive processing called *working memory*, which helps store information in the short term. For example, when students read a passage, they use working memory to retain information, perhaps just long enough to successfully answer questions about it. Or, in math, students might use it to keep track of which step they are on in order to solve a problem correctly.

Working memory is like the brain's scratchpad. It's a core executive function skill that neuroscientist Adele Diamond determined is critical for cognitive, social, and psychological development; success in school and in life; and mental and physical health. Research supports the connection between strong working memory and academic success, especially as it relates to math and reading comprehension.

The good news is that working memory can improve, simply, through play. Making believe can have a most profound impact on young minds: When children "self-distance" or pretend to be someone else, these skills actually improve. As a theater teacher, I already believed that imagination could unlock incredible potential in our young people. The studies about the "Batman Effect" led me to collaborate with Mount Sinai Parenting Center on guided-play games that educators and families can use to practice these brain-based self-control skills.

The following theater games build students' capacity for attention regulation and especially their working memory. You can add this social and emotional learning (SEL) boost to your morning-meeting routine or tie it into your curriculum.

4 Theater Games That Boost Working Memory and Other Skills

1. Movement Story and Sound Story. (*Literacy*) Start by making up a simple story with your students. Anytime a new character or element is introduced, ask them to act it out with a gesture. Once there are about five gestures, have the class retell the story using just the movements and no words. I call this Movement Story. You can follow a similar pattern and play Sound Story with noises or catchphrases. Have students take turns and retell what they made up, just through the sounds. As they get more adept at this, build longer stories together, helping to increase their stamina for recalling more information.

2. Taxi. (*Imagination*) Dramatic play requires young children to keep information in mind, like who their character is and what the rules of the world are. A great example of this is in the improv game Taxi, where kids imagine they are someone with an important place to go, and the taxi will help them get there. You can start as a driver with kids lined up to hail a ride. One at a time they get in the cab and let you know who they are and where they need to go. The driver can ask some questions, and the student responds in character. The road can wind or bump or detour; there might be magical wings on the cab needed to get them to their destination on time.

After about a minute in the taxi, they "arrive" and need to pay the driver. This could be in the form of magical coins, a special dance, or delicious food. The payment marks the end of their turn, and another student can now hail the taxi. Students are practicing working memory as they follow the established formula of the game and as they hold on to their character throughout their time in the taxi.

3. Four Corner Emotion. (*SEL*) In Four Corner Emotion, students repeat a phrase inspired by different "feeling" words. The phrase could be simple, like "How are you?" or a more complicated line of dialogue from a book. Prepare the game by labeling each corner of your room with a different emotion—for example, *anger*, *fear*, *joy*, and

sadness. Start by having a student say the phrase neutrally. Then, when you call out an emotion, they run to that corner and say the phrase *as if* they are feeling that way. Keep calling out different emotions until the student has visited all four corners.

This game exercises working memory on a variety of levels: Students have to keep the phrase in mind as they move around the room. Additionally, they have to recall the ways that emotion manifests in the body, voice, and face so they can accurately portray it when they get to that corner. For more advanced memory work, have the students recall which corner goes with which emotion rather than having them labeled.

Through playing, students can grow their emotional literacy and learn more feeling vocabulary, which can lead to better academic performance. They can also see the many different ways one emotion can be expressed. For example, "anger" may look seething and quiet for one person but explosive and loud for another, even as they say the same phrase.

4. Landmarks. (*Curriculum tie-ins*) To play Landmarks, first brainstorm a list of specific locations with your class. These could be places in a book, geography terms, or a relevant tie-in with your curriculum. With each of these locales, the students come up with a pose they would make that uniquely symbolizes the place. Experiment with levels, groupings, and using the room creatively.

For example, for a New York study, you might name specific places, like "Brooklyn Bridge" ("Find a partner and raise your arms like a bridge"), "Statue of Liberty" ("Stand on your chair with a pretend book and torch"), and "Central Park Zoo" ("Get on all fours and be an animal!"). Call out the locations, and kids will have to remember and do the gesture that they assigned to it. Turn on music in the background and play it like a freeze dance game, where kids are moving until you call out a "landmark." Much like movement games that help with spelling, this physicalization helps retention and makes the learning all the more fun.