OFFICE OF INSTRUCTION NEWSLETTER

Dennis-Yarmouth Regional School District
May 2022

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Important Dates

May 1	May Day
May 2	Eid Al-Fitr (begins at sundown)
May 3	Teacher Appreciation Day
May 5	Cinco de Mayo
May 8	Mother's Day
May 12	International Nurses Day
May 16	MAP Growth window opens (K-10)
	BAS window opens (K-5)
May 21	Armed Forces Day
May 25	Dr. Wornum PD PreK-5 @ 3:00-5:00pm
May 30	Memorial Day (No School)

May (21 days)

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Teacher Appreciation Week



The Instruction Office would like to extend their appreciation for all you do for our students!

You have been busy this year!

The following recognitions have come to our attention:

Thank you to the numerous teachers who attended and presented to our DY School Committee (including DYHS STEM week presentation, SAE Social Emotional Skill presentation, K-3 Math Coaches presentation, and the English Learners presentation).

Thank you to Curriculum Leadership Council Members who worked to monitor and improve our district curriculum in Literacy, Math, Science, and Social Studies.

Congratulations to Regina Wood who has been appointed as a GBH/NEPM Educator Ambassador.

Congratulations to Elena Schuck who was named as Southeast Co-Chair on the 2021-2022 Executive Board of the Massachusetts Library Association.

Thanks to all teachers who have taken part in our quest to create a DLCS pathway for our students (including teachers who work on the PACE and DLN grants).

Thanks to DYHS for their dedication to EOS and the creation of the student RISE Team.

Thanks to the Dolphin Way Teams that have worked tirelessly to ensure that our students are safe and ready to learn.

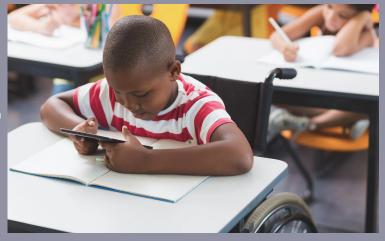
For all the little things you do, including supporting students as they returned to learn during this year filled with uncertainty and supporting building routines when staff absences were high, we are forever grateful.

There is not space to list all your accomplishments but we do recognize the incredible efforts you put forth on behalf of our students!

Teachers Matter!

Motivating Students with Learning Disabilities in Inclusive Classes

"Leveraging Motivation Theory for Research and Practice with Students with Learning Disabilities" by Rebecca Louick and Katherine Muenks in Theory Into Practice, Winter 2022 (Vol. 61, #1, pp. 103-112); the authors can be reached at ralouick@gmail.com and kmuenks@utexas.edu.



In this article in Theory Into Practice, Rebecca Louick (Eastern Michigan University) and Katherine Muenks (University of Texas/Austin) say that students with learning disabilities tend to blame themselves for their classroom struggles and attribute positive achievements to outside forces, not their own efforts. This dynamic creates motivation problems that further damage their performance.

Louick and Muenks explore the research on three motivational theories that are helpful to teachers who have students with disabilities in their regular-education classrooms:

- <u>Goal orientation</u> Students with mastery goals focus on growing their knowledge and understanding of what's
 being taught; those with performance goals want to perform well and show others how competent they are, or
 avoid performing poorly and revealing their incompetence. Research on the goal orientation of students with
 disabilities suggests that these students do better in mastery-oriented classrooms. However, students with LD
 tend to perceive classrooms as more about performance than mastery, even if the teacher emphasizes mastery.
 Students with LD are particularly sensitive about doing poorly, which shifts them to a performance mindset.
- <u>Self-determination</u> According to this theory, students have three core psychological needs in classrooms and the rest of their lives:
 - Relatedness a feeling of connection to others;
 - o Competence ability to manage tasks;
 - Autonomy agency over their environment.

"Satisfaction of these needs," say Louick and Muenks, "promotes intrinsic motivation and leads to the development of skills such as self-regulation and goal-setting." Recent research suggests that "the nature of the school environment can have a significant impact on feelings of autonomy, competence, and relatedness among students with LD." Being able to make choices is a key factor – something that teachers using Universal Design for Learning (UDL) try to build into lessons.

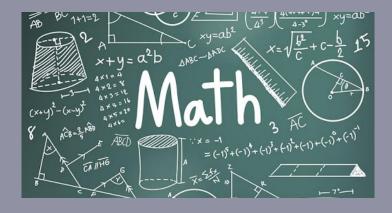
• Expectancy-value - This theory says that students' motivation is influenced by whether they expect they can complete a task and the value they place on the task. Those depend on students' interest in the subject matter, their level of enjoyment, the utility they see in it, whether they've done well in that area before, and the cultural milieu. So far there's been very little research on the application of the expectancy-value theory in classrooms.

Louick and Muenks suggest some practical applications of these theories as teachers in inclusive K-12 classrooms work with students with learning disabilities:

- Emphasize mastery and improvement over performance and competition.
- Get students striving for "personal best" goals.
- Make statements like, "I believe all students can learn and improve" and "I value effort and good strategies over whether you get all of the answers correct."
- Use errors or mistakes as learning opportunities.
- · Allow students to demonstrate improvement by turning in different versions of an assignment.
- Provide clear and frequent feedback.
- Increase the amount of autonomy students have during classes, gradually reducing scaffolding and support.
- Promote a growth mindset students' belief that intelligence and ability can change with effort and good strategies.
- Promote grit passion and perseverance toward long-range goals.
- Avoid saying that students with LD are failing because they lack grit or a growth mindset.

Dealing with Math Anxiety

"Strategies for Alleviating Students' Math Anxiety:
Control-Value Theory in Practice" by Holly Klee, Michelle
Buehl, and Angela Miller in Theory Into Practice, Winter
2022 (Vol. 61, #1, pp.49-61); the authors can be reached
at hklee@gmu.edu, mbuehl@gmu.edu, and
amille35@gmu.edu.



"Up to 30 percent of adults report moderate or severe mathematics anxiety, experiencing fear or dread when encountering mathematics," report Holly Klee, Michelle Buehl, and Angela Miller (George Mason University) in this article in Theory Into Practice. For many people, math anxiety begins in elementary school and increases as they move through the grades, leading them to avoid courses and careers that involve math. Research points to four variables that are at play with math-anxious students:

- They believe that doing well in math is important.
- They compare their performance to that of other students and external benchmarks.
- They strive to not mess up and avoid failure versus mastering the material.
- They believe they have very little control over how they'll do.

Studies have shown there's no correlation between math anxiety and ability and IQ; when students are anxious, they have difficulty with tasks they were able to perform when their anxiety was low.

How does math anxiety make people less capable? Klee, Buehl, and Miller believe it's because the anxiety reduces working memory. 'The cognitive worry experienced by students with mathematics anxiety," they say, "can occupy a large portion of working memory, leaving less available to process the task at hand... Thus, students with mathematics anxiety are performing two tasks when others are performing one: they are working to solve the problem while also coping with their anxiety."

Klee, Buehl, and Miller suggest six ways for teachers to decrease students' math anxiety and thus improve their self-efficacy and performance:

- <u>Conceptual teaching</u> "The 'drill and kill' method of practicing procedures, while easy to implement and effective in producing 'correct' answers, does not help students gain deep understanding of mathematics concepts," say the authors. It's better to frame goals in terms of understanding versus correctness and good grades, praise students for working hard and explaining their reasoning, and wrap up lessons with a short explanation of the conceptual takeaways.
- <u>Contextualizing mathematics</u> Studies show that the more personal and real-world connections students see, the less anxious they are, the more agency they feel, and the better they do.
- <u>Partner and group work</u> "Encouraging students to work together to discuss potential solutions," say the authors, "provides students the opportunity to voice their own understandings and potentially recognize there are multiple ways to find the correct solution, which can also support autonomy." Working together in pairs or small groups is also reassuring when students realize that they're not the only ones having difficulty. In addition, they can get insights as they wrestle together with problems and come up with novel solutions. Group work increases student autonomy a valuable psychological factor in success and allows the teacher to circulate and get ideas about what's causing difficulty and how to boost the conceptual level of the material.
- Formative assessment and feedback Frequent, low-stakes checks for understanding let the teacher know whether to slow the lesson down or increase the conceptual level, and also give students feedback on their level of understanding perhaps a sense of mastery. Low-stakes assessments convey the importance of mastery, versus students comparing themselves to peers. Short online quizzes during and after class give students an immediate sense of how they are doing and focus on whether they used successful or unsuccessful strategies. Some teachers ask students to self-report on their level of mastery and confidence and follow up with individual check-ins.

Dealing with Math Anxiety (Cont.)

- How summative assessments are framed Final exams and end-of-semester tests are when student anxiety is highest, and teachers need to address this head on. Having students talk openly about how they're feeling before a big test is surprisingly helpful, say the authors: students realize they're not alone and gain a greater sense of self-efficacy and control. It's important for teachers to verbally emphasize mastery This is an opportunity to show what you know versus performance I'm looking to catch you on what you don't know and compare you to your classmates. Teachers should point out that the summative assessment has the same material students have been seeing in formative assessments in recent weeks. It's also good to be open to feedback on the quality of test questions: if all students got a question wrong, that test item needs to be revised or the teacher needs to change how the concept was taught.
- Student awareness of strategies to address math anxiety "One of the most powerful things we can do as educators is to help students be aware of the anxiety they are feeling," say Klee, Buehl, and Miller. Polling students on their anxiety on the first day of class reveals that students are not alone in the way they are feeling, which is tremendously reassuring. "Hearing anxiety is normal seems to function as a form of social persuasion that increases self-efficacy beliefs and decreases anxiety," they say. "Checking in throughout the semester, especially around exams, continues this acknowledgement from educators and increases students' sense of autonomy. Making anxiety a purposeful conversation is an important strategy for reducing it." One study showed that getting students to write about their worries just before an exam improved performance and speeded up processing time, indicating that working memory had been improved by neutralizing some of those anxious thoughts. Mindfulness interventions have also been shown to improve performance for mathanxious students.

Homework Principles

<u>"Does Homework Matter?"</u> by Alison Baran in Independent School, Winter 2022 (Vol. 82, #2, pp. 78-81); Baran can be reached at <u>abaran@parkschool.net</u>.



In this Independent School article, Maryland elementary teacher Alison Baran shares the guidelines her school developed for out-of-school assignments:

- Children have a right to playtime, extracurricular activities, downtime, and sleep.
- Parents should not be judged for how they regulate their children's time outside school.
- Homework assignments should have a clear purpose.
- If a homework assignment doesn't help further learning, the default might be no homework.
- The rigor of homework (e.g., math facts, amount of reading) should vary by grade.
- The type of homework should vary depending on what is happening in class.
- The reason for an assignment should be articulated to students, including the fact that a certain portion might be challenging.
- Tasks should be personally relevant to students and allow for choices.
- Homework assignments are more helpful when students feel competent and confident with the material being assigned.
- Children deserve feedback on homework they've completed.
- Teachers might consider assigning no homework for a set period of time.

Incentivizing Learning and Growth Over Grades

(Originally titled "The Assessment System That Made Me Love Grading Again (Yes, Really!)")

"The Assessment System That Made Me Love Grading Again (Yes, Really!)" by Alexis Wiggins in Educational Leadership, April 2022 (Vol. 79, #7, 24-29); Wiggins can be reached at awiggins@ceelcenter.org.



"While I loved my job as an English teacher, I had always dreaded grading," says Alexis Wiggins in this article in Educational Leadership. As a rookie teacher, she was endlessly frustrated that her high-school students kept making the same errors in their writing – fragmented sentences, vague language, superficial thesis statements – after she'd burned the midnight oil writing marginal notes on those problems in earlier papers. Wiggins decided to try a different approach: using a rubric, she rated students' drafts at three levels:

- Publishable A+, A, or A-
- Revisable B+ to D Something needs to be fixed
- Redo Incomplete or F Completely misses the mark

Wiggins allowed students to revise their papers as many times as they wanted, and most worked hard to improve their writing.

The downside, says Wiggins: "It was killing me. I couldn't handle the volume of revised papers." She abandoned the idea

Ten years later, Wiggins decided to give revision-based teaching another try. She kept the Publishable/Revisable/Redo categories, but used a more-detailed, standards-based rubric. It spelled out the Publishable standard - performance at the highest level - and students were assessed on whether they hit the standard or not. The new system worked, says Wiggins. Here's why:

- Better feedback for students Because there was a detailed description of Publishable work, commenting on students' drafts took less time the rubric did half the work: "I could simply highlight the rubric descriptor, leave a short comment, and suggest a meeting if the student needed more feedback." Wiggins also showed students examples of exemplary work from previous students or published work.
- Focused on learning, not a grade Students no longer wept when they got papers back, nor did they ask at the end of the semester what they could do to pull up their grade. "Now," says Wiggins, "as if someone had waved a magic wand, I suddenly had zero conversations about grades with students. Zero. The only questions students now had were about how to improve their work. It was like all my English teacher dreams had come true."
- Streamlined grading With more-precise rubrics and exemplars of good writing, grading was faster and more effective; it was simply feedback against the goal of Publishable. "I wasn't rereading whole drafts each time," says Wiggins; "now I would merely review the previous rubric's feedback and look for the criteria that had been marked as not yet Publishable." Students used the feedback to make rapid progress; by January many assignments were already Publishable or needed only minor tweaks.

In addition, the tension around grades – a B+ versus an A- that students thought would make a difference in their college ambitions – was drastically reduced. Without grades on their drafts, which students had previously seen "as representative of their own value as learners," says Wiggins, "there were no more charged emotions. No more tears or crushed looks. Uncoupling the work from lettered and numbered values allowed all of us to refocus on the work itself, not the student. Assessment suddenly felt like the tool it was meant to be, not a weapon." In anonymous surveys, 19 of the 20 students in the course said this was the best assessment system they had ever experienced. The consensus: "Every class should do this."

Several colleagues at Wiggins's Texas high school tried the system with the same positive results, and she believes it should work at the middle and elementary levels as well. She does have these cautionary notes:

- Figure out the total number of assessments for the grading period up front.
- Close the door on student revisions two weeks before final grades are due.
- Several times a semester, give students an update on the grade they will get if they choose not to make further revisions.
- Keep track of quizzes, homework, and notes, but don't make formative work part of students' grades. "This is so we can focus on the bigger skills in the summative work and revision process," says Wiggins.

Frequent Writing, Rapid Feedback, and Student Ownership (Originally titled "Reimagining the Writing Cycle")

"Reimagining the Writing Cycle" by Julie Sloan and Elizabeth Peters in Educational Leadership, April 2022 (Vol. 79, #7, online only)



In this Educational Leadership article, instructional coach Julie Sloan and high-school English teacher Elizabeth Peters (Boston Public Schools) say grading students' writing is a daunting task that's often put off for days or weeks, and when it's returned, students often glance at their grades and stuff papers into backpacks, never to be seen again. Timely feedback is vital to becoming a better writer, and teenagers' attention spans are short, so what are teachers to do?

Sloan and Peters propose that rather than having students produce long, polished pieces at the end of a unit or term, teachers should use a different approach. The details:

- Foundational instruction in writing Teachers focus on transferable, clearly defined writing skills and show students models of effective writing.
- More-frequent, shorter writing assignments Every week (or every other week) students compose a short, ondemand piece of writing in class.
- Prompt feedback Teachers block out time in their weekly schedules (perhaps Thursday afternoons) and blitz through the writing with the goal of getting it back to students the next day. Sloan and Peters say it's important to set limits on how much time this takes, so the pile of correcting doesn't build up.
- Feedback codes Completing this process is manageable because the compositions are short and teachers use shorthand feedback codes - for example, R1 means "Reasoning needs more explanation." The goal is not to "fix" each piece of writing but give students next steps to improve it themselves. "This approach," they say, "frees teachers to make only a few, well-chosen comments and then move on to the next student's writing." The feedback codes, ideally developed by teacher teams, become a shared language about quality writing, replacing "pet peeves" with a depersonalized analysis of common problems with teenagers' writing - what it means, for example, when teachers say a student's writing is "vague." A common set of codes also sets clear expectations, addressing the key issue of equity.
- Student ownership In class the next day, students look at the teacher's feedback, decode the annotations, figure out what needs to be revised, and get to work. "No matter how earnest or how thorough our feedback to students is," say Sloan and Peters, "it only matters if students see it, internalize it, and use it to improve their work... Students also often enjoy this process of 'figuring it out' by owning their own work and decisions. Codes can help free teachers from the tendency to do the thinking for their students and place the responsibility - and the joy - of authentic writing and decision-making onto the student writers themselves." Students' work is the lesson for that day - one less prep for the teacher.
- <u>Goal-setting</u> Students set a goal for the following week, focusing on particular areas of improvement. When they get their revised compositions back the following week, they reflect on their progress and see how their general writing skills are developing.
- A predictable routine Repeating this process week after week provides deliberate practice, a key ingredient in improvement. "Having a regular, predictable writing and revising routine," say Sloan and Peters, "builds the idea that becoming a writer is not about inborn skill; it's about practice. People become better through writing and revising regularly."

Setting the Stage for Student-Led Parent Conferences

"Getting Started with Learner-Led Conferences" by Paul Emerich France in Edutopia, April 8, 2022



"Traditional parent-teacher conferences are exhausting for teachers and tend to counteract the learner-driven environments we seek to create for students," says writer/consultant Paul Emerich France in this article in Edutopia. He makes the case for student-led conferences in which students reflect on what went well and what they struggled with, and talk about next steps.

Logical as this sounds, orchestrating student-led conferences is not without challenges. France suggests the following steps:

- Have students keep portfolios of their work. In parent conferences, students will have an easier time describing
 their learning if they have lots of tangible artifacts at their fingertips. It's a good idea to use sticky notes to help
 students identify the best artifacts to illustrate learning and struggles. Building portfolios essentially
 scrapbooks of learning should start at the beginning of the year, fostering a continuous process of reflection as
 students decide what they add to their portfolios.
- <u>Make self-reflection a classroom routine.</u> If students aren't regularly thinking and talking about what they've learned, the skills they've building, their difficulties, and their aspirations, says France, parent conferences will be "clunky and superficial." The best approach is for teachers to compile a collective class journal with students, and pause at the end of each lesson to reflect on what worked, what didn't, and how they can follow up in future lessons.
- Rehearse using sentence starters. Students' sharing in conferences will benefit from practice with phrases like these:
 - o This artifact shows I am succeeding with....
 - o This one shows I am still challenged by....
 - o I used to.... Now I....
 - o Today, I succeeded by....
 - o Today, I struggled with....
 - o Next time, I will....
 - o I am puzzled by....
 - o I am wondering....

If this is the first time students have led a conference, they'll need modeling and practice - perhaps role-playing with classmates and seeing a demonstration in front of the class.

- <u>Generate criteria for what a well-run conference looks like</u> for example, using the sentence starters, showcasing exemplary work, and effective voice and body language.
- <u>Be ready to jump in and support.</u> "Family dynamics and student personalities create a lot of uncertainty when starting learner-led conferences," says France. There are moments when teachers will want to share their own reflections or ask a probing question. Having students take the lead in a parent conference and showcasing their work is a major shift; the more they run the show, the better.
- <u>Trust the process.</u> Some parents may be uncomfortable with a kid rather than the teacher running the
 conference, says France, "as they, too, have been conditioned to believe that education is something that is done
 to students, as opposed to a process for student empowerment and liberation." Hand-holding and support may
 be necessary with some parents, but seeing their children handle the challenge is often enough to convince
 them of the value of the process.

STEM



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With funding from the Code.org, Commonwealth of Massachusetts and local business and industry, we offer training at low or no cost to school districts and educators, create ongoing support through professional learning networks, and prepare teachers to change lives. https://www.csforma.org/professional-development-3/



Your Daily Learning Platform

Discovery Education is on CLEVER



Did You Hear That? (K-12)

After listening to two sound effects, students use the mental images they create to write a paragraph or short story.

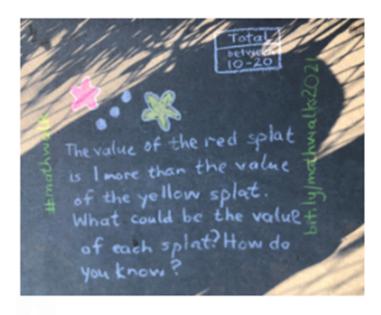
Daily Lesson Tip: Did you know DE has tons of great audio? From songs to podcasts, you can find, save, assign, and share audio resources. **Learn More**

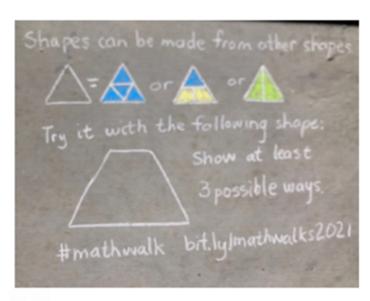
From songs to podcasts, DE is full of great audio resources!

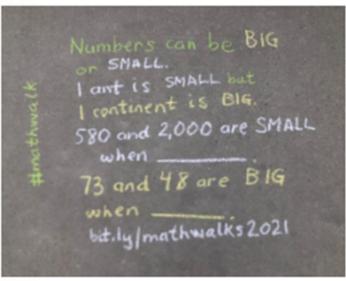
Once you finde some, try out this instructional strategy to engage students in a fun, unique way.

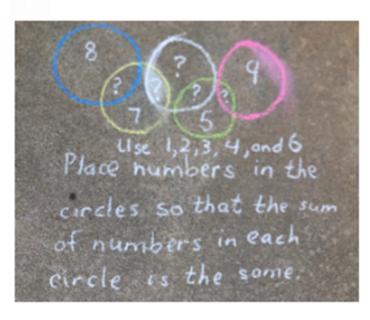
STEM - Math Walks

Math Walks by Thy Dinh









On March 24, 2020, everything stopped. Well, not everything, people were still walking (that is pretty much all they could do.) Covid 19 hijacked our normal routines, school doors were closed, gatherings canceled, and going to the store was a delicate act of trying to get toilet paper, while remaining 6ft away from everyone else.

As I walked down our neighborhood street (trying to escape the Zoombie feeling from too many online meetings), I saw a mom and her 2 kids doing "PE" on a walk. "Go to the corner and do 5 jumping jacks. Now 3 windmills." This ignited a spark of bringing math to daily walks!

Learn more about Math Walks: https://sites.google.com/powayusd.com/math-walks/