



Dennis-Yarmouth Regional School District



Instructional Office Newsletter

Reading Recovery's Lessons for Regular Classrooms

In this article in *The Reading Teacher*, Kayla Lewis (Missouri State University) says she was not thrilled when her district made her to go through Reading Recovery training as she transitioned to being a literacy coach. She had ten years of classroom experience, a master's degree in reading, and had taught literacy at the university level. What could Reading Recovery add? Lewis was familiar with Marie Clay's pioneering work in New Zealand, Reading Recovery's track record with struggling readers, and its spreading implementation in the U.S. beginning in the 1980s. But the training just didn't seem relevant to the work she was about to do coaching K-5 teachers.

"I am not ashamed to admit that I was wrong," says Lewis. "Reading Recovery training and the teachings of Clay had a profound effect on my teaching and forever changed the way I view students who struggle." Lewis believes that Reading Recovery, while it focuses on individual instruction for at-risk first graders, contains a number of instructional insights that can be helpful to all elementary teachers:

- **Observing well** – "It is essential for us to put aside our own agendas and really notice what students are able to do," says Lewis. One of the most helpful tools is video – teachers watching themselves after a lesson and thinking through all the teaching moves they made and their students' responses.
- **Focusing on what students can do** – "Struggling students would come to me needing assistance, and all I saw were the holes and the tangles," says Lewis. She learned how to zero in on the competencies and knowledge students brought to the

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IMPORTANT DATES

October 5 - All Cape Professional Development Day

October 8 – Columbus Day NO SCHOOL

October 23 – Half Day for K-5 Parent Conferences
6-12 PD

October 25 – Half Day for K-5 Parent Conferences
6-12 PD

October 31 - Halloween

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 CO being highly sensitive to any type of fragrance, we ask that staff visiting/meeting at the Administration building 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!





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table – “roaming around in the known” is a Reading Recovery routine in early lessons. When students are overwhelmed by all the standards they have to master, frustrated, and feeling like failures, finding areas of competence is the key to building confidence and ultimately skillful reading and writing.

- **Working in the zone of proximal development** – Vygotsky famously defined the optimal learning zone as what students can do with assistance – what they can *almost* do. It’s impractical for teachers to apply this principle to a whole class, says Lewis, but in small groups, teachers can use assessments and observation to tune in on each child’s Goldilocks level of difficulty and scaffold their progress with just the right amount of support, not wasting time on things they can already do and not frustrating them with tasks that are too difficult. Of course children’s zones move up as they become more proficient, prompting the teacher to make constant adjustments.



- **Knowing the difference between scaffolding and rescuing** – During her Reading Recovery training, Lewis asked for her coach’s help with a particularly challenging student. The coach watched a lesson video and said, “You’re hovering.” A little defensive, Lewis said she was *helping* the student. “No,” said the coach. “You are making him dependent on you. Every time he struggles, you jump in and help him.” Again, Lewis pushed back, saying she was doing her job, teaching the student. The coach corrected her: what she was doing was *rescuing* the boy, teaching him to wait for her support every time he got stuck, instead of having him struggle a little and learn something new. Lewis says this was a pivotal moment in her development as a teacher. Going forward, she always kept Clay’s principle in mind: “The teacher never does anything for the child that he could do himself.” Lewis suggests three questions for classroom teachers: *Do your prompts promote independence or dependence? Are you scaffolding or rescuing? and Who’s doing the work here?*

- **Taking responsibility when a student isn’t progressing** – “As a classroom teacher, I used to say, ‘All students can learn,’ but I am

not sure that I truly believed it,” says Lewis. “I cannot tell you how many students I unnecessarily referred to our special education testing team. Most of the students I referred did not qualify. Why? Because they did not need special education; they needed me to do a better job of teaching them.” Most struggling readers have a *difference*, she says, not a disability. Another Clay mantra: “If the child is a struggling reader or writer, the conclusion must be that we have not yet discovered the way to help him learn.” Through observations and assessment, the teacher needs to figure out what’s going on, reflect on which teaching moves aren’t working, and make the appropriate adjustment.

- **Less teacher talk** – “As a teacher, I talk a lot,” says Lewis. “We all talk a lot. It is part of our job.” But during Reading Recovery training, she realized that what she was saying was often getting in students’ way. “Once I realized the power of my words,” she says, “I did less talking and made the talking that I did do more precise. I learned to listen and observe, and in those quiet moments, I was able to see what my students could do without my support and constant interrupting. I will not say it was easy. I often had a hard time biting my tongue, but as I became quieter and more deliberate in what I chose to say, my students became more untangled.”

- **Seeing that no two readers are the same** – Lewis has learned that one-size-fits-all book introductions and all-purpose lesson plans don’t connect with many students. She suggests that classroom teachers systematically cycle through their students observing two or three a day, taking running records, and learning the type of prompting and support each one needs. “Over time,” she says, “you will have gathered information on each student in your class, and another cycle of observation can begin. The time and effort will pay off when your students have one of those light-bulb moments that we teachers live for.”

- **The importance of teacher teamwork** – After she completed Reading Recovery training, Lewis served as a literacy coach in her school, working closely with a colleague who taught Reading Recovery, building bridges among Reading Recovery, regular education, Title I, and special education teachers. This meant that students heard “the same





language, the same prompting, and the same type of instruction in all places,” says Lewis. “Hearing one voice allowed many of our students to make more accelerated progress than any one of us could have achieved alone.”

- **Being a lifelong learner** – “I have learned that there are so many people who know so much more about reading than I ever will,” concludes Lewis, “and in that, I have learned to listen.” She urges all teachers to take this stance. “Soak in the knowledge of those around you. Read often. Keep up with the latest research. Reflect on your own teaching practices. Ensure that your knowledge never remains stagnant and that you continue to grow in your learning.”

“Lessons Learned: Applying Principles of Reading Recovery in the Classroom” by Kayla Lewis in *The Reading Teacher*, May/June 2018 (Vol. 71, #6, p. 727-734),

<https://bit.ly/2IOLZNe>; Lewis can be reached at kaylalewis@missouristate.edu.

Making Grades Fair, Accurate, Specific, and Timely

In this *Phi Delta Kappan* article, author/consultant Ken O'Connor, Lee Ann Jung (San Diego State University), and Douglas Reeves (Creative Leadership Solutions) bemoan the shortcomings of traditional grading. The focus on mathematical precision, say the authors, “unfortunately leads students – and parents – to fixate on the numbers rather than on the learning.” College admissions officers and testing experts increasingly doubt the value of grades, which too often are a mash-up of achievement, behavior, compliance, and test-taking skill. Some colleges, including MIT and Wellesley, are reforming their grading policies, moving toward providing rich feedback, but no letter grades, to first-year students. K-12 schools that rely on points and extrinsic motivators undermine their students’ intrinsic motivation and the ultimate goal of producing self-directed, independent learners. The fact that so many high-school graduates end up taking remedial courses and failing courses in their first year of college is a sure sign that K-12 grading needs to be fixed. The ideal: grades that are FAST – fair, accurate, specific, and timely:

- **Fair** – Fairness involves communicating

current achievement to everyone who has the need and right to know – especially students – and giving all students equal opportunity to learn and show what they know, understand, and can do. “This means, for example, that the time available on tests and exams must be flexible, not fixed,” say O'Connor, Jung, and Reeves, “and that students should almost always have a variety of ways to demonstrate their knowledge, understanding, and skills.”

- **Accurate** – A key element is separating students’ grades on academic achievement from judgments on non-academic behaviors. The frequency of assessment is also important, say O'Connor, Jung, and Reeves: teachers need to find the Goldilocks amount of testing, sampling enough to get a good sense of how students are doing, giving them multiple opportunities to show their stuff but not burdening them with too many assessments (especially those of low quality). Teachers should factor in their own professional judgment when giving final grades; rather than relying on calculating the mean of a semester or year of grades, they should assess students’ ultimate level of proficiency. The authors urge school leaders to forbid practices that produce inaccurate grades, such as penalties for late work, academic dishonesty, absences, and inappropriate behavior; extra credit for behaviors that are unrelated to standards; group scores; grading on a curve; zeroes on the 101-point scale; students’ level of English proficiency masking math proficiency; and grading homework.

- **Specific** – This means basing grades on standards and learning goals (not assessment methods) and clear descriptions of a limited number of levels (not points and percentages). The worst-case scenario, say O'Connor, Jung, and Reeves, is final grades representing “a mechanical and mindless calculation that reflects not the students’ progress, but punishment for every missed homework assignment and wrong answer along the way.” The best scenario is lots of specific error-correction and praise along the way, like the kind given by good music teachers and athletic coaches, and then a fair summation of progress and attainment at the end. A growing number of schools are joining the Mastery Transcript Consortium and working toward a radically different transcript that de-emphasizes grades and shows proficiencies developed over students’ years in high school (see www.mastery.org).





• **Timely** – This is a key pathway to the ultimate purpose of classroom assessment, say the authors: “to provide information that improves teaching and learning.” The more promptly assessment results are communicated, the sooner teachers and students can do something about learning problems. Grades that are eleventh-hour predictions of failure don’t help anyone. But timely feedback is challenging for middle- and high-school teachers with more than a hundred students and elementary teachers juggling multiple subjects. The big question is whether the teacher is measuring what matters. “If we have more checklists, quizzes, and assignments than we have time for,” say O’Connor, Jung, and Reeves, “it may be best to reduce the quantity of assessments in order to increase the quality. Thoughtfully assessing students’ performance on a single project that showcases their skills authentically across multiple standards may be a better choice than marking many quizzes that provide little fuel for reflection and improvement.”

In conclusion, the authors caution against waiting for complete buy-in before making necessary changes in grading. Leaders need to challenge their colleagues to look at the evidence about better approaches and test hypotheses. “Effective change requires a sense of urgency, common ground, and action, but it doesn’t necessarily require universal agreement,” say O’Connor, Jung, and Reeves. “Change is best achieved through a judicious balance of pressure and support... We must reject the ‘pep rally’ model that attempts to garner universal excitement for change. Rather, we can use what researchers have called the ‘nudge’ factor... to create circumstances where the FAST approach is more appealing and easier to implement... Parents, communities, unions, and thought leaders may never agree on a specific grading procedure, but it’s probable that they will agree on values, such as the desire to build personal responsibility and preparedness for the world beyond school... Grading practices that have the potential to reduce failure, reduce dropouts, and improve school safety are, indeed, urgent.”



“Gearing Up for FAST Grading and Reporting” by Ken O’Connor, Lee Ann Jung, and Douglas Reeves in *Phi Delta Kappan*, May 2018 (Vol. 99, #8, p. 67-71),

<https://bit.ly/2IVifFo>; the authors can be reached at kenoc@aol.com, jung@studentgrowth.org, and douglas.reeves@ChangeLeaders.com.

Jennifer Gonzalez on Improving Grading



“Grades are inherently imperfect,” says Jennifer Gonzalez in this *Cult of Pedagogy* article. “To truly assess our students’ learning, we need to get to know them, observe them, and study a wide sampling of their work over time.” But in the real world of classrooms, there’s a strong tug to simplify achievement into grades, and that can introduce all manner of distortions: a volcano-building project (with extra credit if the model erupted) where parental resources were a big factor; a student who got a D on a well-crafted essay because it wasn’t neat and had some errors; a student who earned extra credit by donating tissues and hand sanitizer to the class; and a student who got half credit for a project turned in a day late under the teacher’s “no excuses” late policy. “In all these cases,” says Gonzalez, “the grade was not an accurate representation of what a student has learned. This is a problem of design.” Parents, students, and teachers act as though grades have some absolute value, but they actually depend on lots of decisions that each teacher makes about assignments, assessment, and grading criteria. Gonzalez acknowledges the challenge of making grades meaningful and suggests some guiding questions for being “thoughtful and deliberate when we calculate them:”

• **What learning does this task measure?** With her own children, Gonzalez is amazed at how often assignments “have no real connection to what the curriculum says students are learning” – for example, students making a relief map showing geographic features, when the objective is explaining how geography affects culture.

• **Are you teaching what you will measure?** “We often assign points for skills and qualities that students happen to bring with them, but are never taught in class,” says Gonzalez. Collaboration





skills is an example – we grade on them, but are we systematically teaching them?

- **What will quality work look like on this task?** Sometimes teachers have a vague idea of what the end product should be, but don't know exactly until the work is turned in – too late for students to rise to expectations. "We'll get better work from students and judge it more fairly if we identify and communicate the criteria for success ahead of time," says Gonzalez.

- **How much of the grade depends on outside resources?** Parents' contributions of supplies, access to technology, transportation, and assistance vary from home to home.

- **Can all students do well on this task, regardless of how they learn best?** Assignments shouldn't be designed with only one kind of learner in mind. The Universal Design for Learning framework is helpful in assigning work that is accessible to all students.

- **Should this assignment be called "practice" instead?** Teachers may believe that students will apply themselves only if the work will be graded. But some activities should be practice for a task that will be graded. For example, students might practice long-division problems until they're proficient enough to take the real test. This approach also saves teachers a lot of grading.

- **How should we deal with late work?** "In classes where late work is penalized, a grade is a reflection of the student's time management, or of stress, or perfectionism, or dozens of other possible factors," says Gonzalez. "What it isn't is a reflection of learning."

- **What about extra credit?** Giving credit for work that doesn't directly reflect learning distorts grades, including giving a false impression of mastery. "Students who are doing so well on the regular class work that they finish early don't need extra credit," says Gonzalez; "they need differentiated assignments and more challenge. Students who do poorly on assignments don't need extra credit to make up the missing points; they need opportunities to re-do and improve the work."

- **And what about averaging**



grades? Simply adding up grades and dividing by the number of assignments can give an inaccurate picture of what students are actually learning. One alternative is giving more weight to grades later in the learning progression so students' improving level of mastery is reflected in final grades.

"How Accurate Are Your Grades?" by Jennifer Gonzalez in The Cult of Pedagogy, April 22, 2018, <https://www.cultofpedagogy.com/accurate-grades/>

Literature Circles That Help Students Appreciate Graphic Novels

In this article in *Language Arts*, David Low (California State University/Fresno) and Katrina Bartow Jacobs (University of Pittsburgh) salute the idea of literature circles of 4-6 students – "small, peer-led discussion groups whose members have chosen to read the same story, poem, article, or book." For groups that choose to read graphic novels and manga, Low and Jacobs suggest six assigned roles so students will fully appreciate what makes "graphica" unique and powerful:



- **Image expert** – This student looks for how images, icons, and figures are represented in the text – perspective, angles, close-up and faraway shots, and bird's-eye versus worm's-eye views. Are drawings cartoony, sketchy, or realistic? Do they use visual symbols, clichés, or stereotypes?

- **Gutter dweller** – This student focuses on the layout of pages within the graphic text – the placement of panels and the blank spaces that separate them, transitions including the passage of time and change of venue or perspective.

- **Text maven** – This student comments on the use of thought balloons, expository captions, and sound effects, including text size and fonts.

- **Palette cleanser** – This student considers the role of color and grayscale in conveying narrative tone and characters' state of mind.

- **Synergizer** – "Much of graphica's power comes





from its ability to allow simultaneous competing meanings across different modes,” say Low and Jacobs. The synergizer’s job is to be the gestalt analyst, considering how the relationships among images, words, layout, and other elements work together on the page.

- **Superfan** – This group member puts the graphic text in its larger context. Does it reference other works, in any medium or genre, or real-life or historical events? What kinds of reviews has it received?

“Literature Circle Roles for Discussing Graphica in Language Arts Classrooms” by David Low and Katrina Bartow Jacobs in *Language Arts*, May 2018 (Vol. 95, #5, p. 322-331),

<https://bit.ly/2IDmJgD> (the article has a number of examples of graphic texts); the authors can be reached at dlow@csufresno.edu and kbjacobs@pitt.edu.

Why Learn Math?

“We live in a world where mathematics is increasingly used to characterize societal problems and formulate proposed solutions,” says Matthew Larson, outgoing president of the National Council of Teachers of Mathematics in this *MyNCTM* article. “Without mathematics literacy, and a strong mathematics identity and sense of agency, members of our society will increasingly find it difficult to comprehend and critique, let alone challenge, many of the decisions and actions of those in power in political, social, scientific, and economic institutions.”

Larson feels the pain of math teachers who are asked in the middle of a lesson, “Why do we have to learn this?” This perennial question raises a bigger one: *Why do we teach math?* How teachers answer that question strongly influences how they teach the subject and who they believe should learn mathematics. British professor Paul Ernest proposed three major rationales:

- **Necessary math** – That is, functional, practical, work-related numeracy knowledge and skills for employment and survival in the economy. Also in this category is advanced specialist knowledge for those who take math to a higher level.



- **Math for personal and social relevance** – This includes the development of confidence and persistence, social empowerment, and posing and solving math problems.

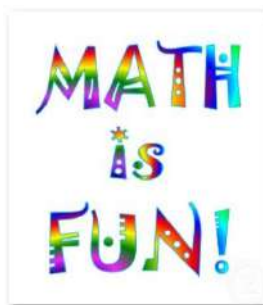
- **Math appreciation as an element of culture** – Understanding the elegance of mathematics and its role in history, culture, and society.

The first – necessary math – has been the focus in most math classrooms, all the way back to the early days of math schooling in 14th-century Europe, through the utilitarian needs of the North American colonies, the Sputnik-era scramble to upgrade math and science preparation, right through to the current emphasis on college and career readiness. “I admit,” says Larson, “I have more than once told students that the reason they have to learn something is because they ‘will need it for college’ or ‘the next course.’ Today I appreciate that this response was lazy on my part, and from my perspective, while critically important, not even the primary reason why we should teach mathematics.”

A far better rationale, says Larson, is contained in NCTM’s vision statement: “We envision a world where everyone is enthused about mathematics, sees the value and beauty of mathematics, and is empowered by the opportunities mathematics affords.” What does empowerment look like? Equipping students for active participation in democratic society, including analysis and critical thinking so they can assess claims made by those in power as truthful and helpful – or false and misleading. “If we teach mathematics so that students are empowered by it,” Larson believes, “preparation for college and careers will largely take care of itself.”

“We should never forget,” he concludes, “or fail to appreciate, that as teachers of mathematics, each and every one of us is engaged in something much more important than our daily tasks of instruction, curriculum, and assessment.

We are engaged in empowering our students so that they can improve not only their own lives, but can also better understand and critique the world around them.” Larson challenges teachers and school leaders to confront these questions:

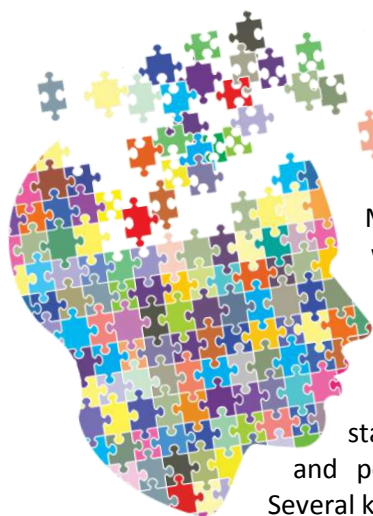




- ✚ Are your school's and math department's goals for students broad enough?
- ✚ Are ambitious, visionary goals clear to students and parents?
- ✚ Are those goals reflected in day-to-day instruction?

"Why Teach Mathematics?" by Matthew Larson in MyNCTM, February 21, 2018, <https://bit.ly/2orV4X2>, spotted in a Jerry Becker blog, jbecker@siu.edu.

New Recommendations for High-School Math



In this *Education Week* article, Stephen Sawchuk reports on a study just released by the National Council of Teachers of Mathematics. The report was a response to decades of stagnant 12th-grade NAEP scores and a sense that the high-school Common Core math standards were not as lean and polished as those for K-8. Several key points:

- **Scope** – The high-school math curriculum should aim for more than college and career preparation, focusing on the math students will need to be literate participants in civic life. This includes being able to interpret research; understand math in polls, the media, and other communications; make good financial decisions; and identify, interpret, and critically appraise math in social, scientific, and political systems.
- **Core** – Students should master a set of "essential concepts" in four years of math courses, including

numbers, algebra, and functions; geometry and measurement; and statistics and probability. In statistics, this would mean understanding problems of bias and validity and the difference in research methods that use sample surveys, experiments, and observational studies. In algebra, it would mean scaling back legacy content like solving equations and inequalities, instead spending more time on using math techniques to produce a certain outcome, solve a problem, or provide proofs of why algebraic statements are true.

"Today the emphasis has to move to students understanding, here's a problem situation that can be modeled by using a quadratic equation and then solved," says Matt Larson, outgoing NCTM president. "And when you think you have a solution, understanding the math enough to say, 'Yeah, my solution seems reasonable,' or 'No, that doesn't seem to make sense in this particular situation.'"

- **Equity** – Classes should be detracked (no more "honors" and "remedial" versions of the same course) so students of color don't wind up in dead-end math pathways. The negative effects of tracking are exacerbated by the way teachers are often assigned. "Who is teaching whom in your high-school math department?" asks Larson. "Often it's the case that those teachers who are the most experienced or perceived to be the most capable are assigned the upper-level math classes." The NCTM report acknowledges the challenges of heterogeneous high-school math classes, suggesting that instruction needs to focus on reasoning, problem-solving, using math representations, and eliciting mathematical discourse so students and teachers feel comfortable discussing and critiquing each others' reasoning rather than obsessing on getting the right answer.

- **Integrity** – The NCTM report calls for rethinking math pathways through high school, with all students taking four years of classes that "maintain the integrity" of math standards, require clarity and precision, and don't allow for substituting computer science and other not-really-math courses.

"High Schoolers Should Take 4 Years of Leaner, More Relevant Math, Teachers' Group Says" by Stephen Sawchuk in *Education Week*, April 25, 2018, <https://bit.ly/2r0ZExg>





The Place of Statistics in the High-School Math Sequence

In this *Education Week* article, Sarah Sparks reports that math and science professionals are beginning to question whether calculus should be the pinnacle of the high-school science/ math progression. “The ubiquitous use of data in everything from physics and finance to politics and education,” says Sparks, “is helping to build momentum for a new path in high-school math – one emphasizing statistics and data literacy over calculus.” The Common Core math and Next Generation science standards call for more emphasis on data analysis and statistics, both on their own and integrated into other concepts. And the U.S. Bureau of Labor Statistics estimates that jobs calling for statistics and data literacy are among the ten fastest-growing occupations in the nation.

Calculus used to be seen as a college-level course for students interested in math, physics, and other hard sciences; in 1980, only about 30,000 U.S. high-school students took calculus. But then calculus took on gold-standard status and was seen as essential to getting into an elite university. Today, about 800,000 high-school students take calculus, 150,000 before their junior year – and these students are disproportionately white or Asian, and from families

with household incomes above \$100,000. “Math is even more important to upward mobility now than it was 20 or 30 years ago,”

says Uri Treisman of the University of Texas/Austin, but the current calculus pathway

“is a burial ground for students of color.”

Is taking calculus in high school worth it? A recent report found that many students who took Advanced Placement Calculus AB had to retake calculus in college, and 250,000 needed to retake lower-level courses like precalculus or algebra. The best preparation for success in college calculus, the study found, was getting As in high-school Algebra I and 2 and Geometry.

If high schools shift to putting more emphasis on statistics, there’s a sequence problem: statistics is

often placed *after* calculus in the high-school progression, drawing on formal probability and calculus-based theorems. Treisman has been working on a new mathematics sequence in which a statistics pathway is an alternative to the calculus track and addresses the equity problem. “If we are going to create data science pathways,” he says, “they had better be anchored in things that lead to upward social mobility and have a rigor to them. We have to make sure new pathways have at least equal status as the traditional one – and ensure everyone has access to them. If we allow [statistics and data] to be the easy or weaker path, we relinquish the commitment to equity we started with.”

Ideally, teaching data and statistics in high school would broaden students’ path to STEM and other careers. But where does this fit in? One approach is to create a separate course, analogous to computer science. An alternative is to integrate data and statistics into courses throughout high school – math, biology, history, civics – and make sure students get rigorous exposure to what EDC’s Oceans of Data Institute calls the CLIP criteria:

- ❖ **Complex – Not just looking at hours of sunlight and heights of bean plants;**
- ❖ **Larger data sets – students have to sort information and understand relevance;**
- ❖ **Interactively accessed – not just looking at graphs presented on paper;**
- ❖ **Professionally collected – students have to think about how and why data were collected, and what biases might exist in the sampling.**

“Move Over, Calculus. Statistics Is on the Rise” by Sarah Sparks in *Education Week*, May 23, 2018 (Vol. 37, #32, p. 12-13), <https://bit.ly/2x2JvNC>

