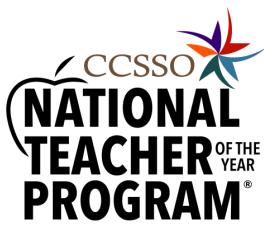


2023 National Teacher of the Year FINALIST



Rebecka Peterson
Oklahoma

School: Union High School
Subject: Mathematics
Grade: 10-12



Rebecka Peterson is a 10th- to 12th-grade mathematics teacher at Union High School in Tulsa, Oklahoma. Peterson says her students bring out the best version of her, and she hopes she does the same. She helps administer the blog “One Good Thing,” in which she posts something good from her classroom every day. She has contributed 1,400 posts to the blog, inspiring her students to reflect on hope and joy in their own journals.

This year, she has broadened the scope of “One Good Thing” as she is visiting teachers in all 77 Oklahoma counties in her role as Oklahoma Teacher of the Year. She reports about Oklahoma educators’ stories of hope, tenacity and creativity on the “Teachers of Oklahoma” social media pages. At the forefront of her education philosophy is listening to stories. A proud immigrant of Swedish-Iranian descent, Peterson is passionate about making mathematics engaging, relevant and accessible to all, no matter their background.

Peterson was recently named one of six state-level finalists for the Presidential Awards for Excellence in Mathematics and Science Teaching. This is Peterson’s 14th year in education and her 11th at Union High School. She earned a Bachelor of Science in mathematics from Oklahoma Wesleyan University and a Master of Arts in mathematics at the University of South Dakota.

Application Questions

- 1. Describe a content lesson or unit that defines you as a teacher. How did you engage students of all backgrounds and abilities in the learning? Show how your deliberate instructional decisions create student learning and reveal your beliefs about teaching and learning.**

As an immigrant of Swedish-Iranian descent and the daughter of medical missionaries, I lived in four countries by age sixteen. While indescribably grateful for my bilingual family and multicultural upbringing, as a child I often felt like an outsider. Moving from continent to continent, I longed so desperately to belong that I compensated by fitting in and performing. I thought I had to earn my spot by what I did, rather than being accepted for who I was.

Now, as a teacher in a district where 72% of students face socioeconomic challenges and 62 languages are spoken, I see myself in my students, who yearn for that same sense of belonging. This has become the foundation of my teaching philosophy: everyone is in, everyone is welcome, everyone has a seat at the table. There is no need to perform: everyone belongs. This is the foundation of democracy, and every day teachers safeguard this foundation.



Six years ago, I formalized this philosophy into a unit. Analyzing AP Calculus exam scores, I noticed students who had taken Precalculus with me had a 100% pass rate, while those who did not had a 75% pass rate. I was committed to closing this gap. “Unit 0: The Calculus of Connection” was born.

Determined to build trust, on the first day of school I spoke freely about my past, sharing my struggles and joys as an immigrant. Afterwards, I asked my students to sign up for individual conference times so I could learn their stories. Listening to every student’s story before school, during lunch, and after school for ten weeks transformed me. Some students stayed for fifteen minutes, others for over two hours. When tragedy called, I learned to show up, to receive whatever they entrusted to me. Their stories brought me to my knees—nearly every student had undergone some form of adversity or trauma, often more monumental than anyone realized.

However, I also noticed class began to flow differently: the atmosphere shifted. Peace, calm, and trust permeated the room. We belonged to each other.

I now listen to over a hundred stories a year. When we learn one another’s stories, we carry a piece of each other with us. This inevitably softens us. Fundamentally, calculus is ingrained. In its first branch, Differential Calculus, we divide segments into infinitesimally small moments in order to analyze precisely what is happening at a single point in time. In Integral Calculus, we accumulate those moments through infinite summations. This unit exposes the lesson of connecting not only to each other but to the very depth of calculus. We differentiate: I hold each learner’s story, moment by moment. Then we integrate: we come together, or accumulate, and connect as a community, knowing we belong to each other.

Since introducing The Calculus of Connection, I have closed the pass-rate disparity from 25 percentage points to 8. Furthermore, in the two years I taught Advanced Precalculus, the National Merit Scholarship Corporation named 12 (in 2021) and 11 (in 2022) of my students National Merit Finalists; the previous two years our district touted three and four finalists, respectively. Yet the statistic I am most proud of is that after making these connections, I have eleven former students who are secondary mathematics educators or pursuing a career in secondary mathematics education; five of them teach in my district. Our current situation is dire. Oklahoma saw the largest drop in the nation in eighth-grade math NAEP scores from 2019-2022; and in 2018 (the most recent data available), Oklahoma colleges graduated only twenty-five students with secondary mathematics education degrees. I feel personally and professionally called to bring high-quality instruction not only to this generation but generations to come by encouraging bright young individuals to also leave their mark in Oklahoma mathematics classrooms.



I hold far-reaching qualitative outcomes just as dear: standing in place of lost parents for Senior Night, knotting my young son's tie before he walked down the aisle as a former student's ring bearer, working with a counselor to help a child escape her abuser, and offering a room to a graduate who had no other safe place.

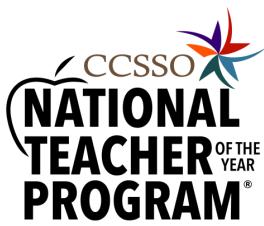
As I travel Oklahoma's 77 counties, my platform, "Creating a Connected Classroom," equips teachers to connect with their students, their peers, themselves, the content, and the world. In creating a connected classroom, my students feel safe to be themselves, ask questions, make mistakes, and try again. The pandemic has unearthed academic, social, and emotional losses. Thankfully, the science is clear: connection is how we heal.

2. Describe a project or initiative you have been involved in that deliberately creates culture in your classroom or school. Describe how you build and use relationships to collaborate and to teach students of all backgrounds, abilities and identities. What is the status of the project today?

In spring 2020, life changed. While proud of Union High School's quick pivot, I wanted to improve for families choosing a virtual calculus option that fall. I requested to teach the course, knowing my district outsources all other virtual courses. As I researched best practices in virtual education, many options lacked what I knew we needed to succeed: a culture of connection. Working in a building with a strong, diverse school culture, I wanted our virtual learners to feel the same sense of belonging as if they were in person. For this program to thrive, every child needed to believe what I believe: they can all learn calculus.

Tweaking the flipped classroom model, I created a course, "Calculus for All." Reversing the traditional lecture model, I coached students to watch a lesson at home. Then, with their peers and me accessible for collaboration, students could practice in class, thereby benefiting virtual and in-person courses alike. The dual courses ran parallel and allowed my students to weave in and out of virtual instruction as needed due to Covid exposure, minimizing learning loss.

Creating and producing over 100 picture-in-picture videos (students see me and the problem I am demonstrating simultaneously) allowed me to bring Calculus for All lessons into students' homes. Questions embedded in each video propelled students to interact with the content; the video would not resume until the question I posed was answered. After interacting with the video lesson, we would then synthesize together—either in person, on Zoom, or asynchronously through our learning management system. Just as I had hoped, students were connected to me and to each other no matter what mode of learning best fit their needs. When asked for course feedback, one student wrote, "Calculus for All with Mrs. Peterson made me forget that I was a virtual student because the collaboration encouraged us to stay motivated." From another:



“Mrs. Peterson’s love for teaching and effective methods expanded to be even more inclusive and tailored to the needs of all her students.”

With the success of this course, my district asked me to create our virtual Precalculus course, allowing me to “teach” hundreds of students on and off my roster. I later published the videos on YouTube, empowering teachers to use them as peer observations and lesson options for students. Now, students and teachers—both in my district and outside it—benefit from these lessons, and untold more will benefit in the future, broadening equity and access.

I still use Calculus for All, as students learn the lesson at the pace right for them. The selling point for me occurred when I discovered I was able to work alongside my students instead of in front of them: I do math with them, not at them. This environment fosters student agency and ownership of learning. One student said, “Calculus for All restored my faith in myself as a student; it evened the playing field for disabled and neurodivergent students like myself, and it reinvigorated my desire to become a teacher. It was life-changing and life-giving.”

While our district has increased to 72% economically disadvantaged students, my calculus pass rate has also increased: from 50% to 87% (the state average is 47%). Last year, 37 of my 103 students boasted a score of 5 (the most 5s my school has witnessed on this test). In 2022, 12% of all students in Oklahoma who passed the AP Calculus AB Exam came from my classroom, 50% of whom identify as an underrepresented race or ethnicity.

These responsive, inclusive methods empower my students to secure college calculus credit. Additionally, the class time gained affords a focus on mental health to further humanize math class—practicing weekly mindfulness, formalizing mental health check-ins, and curating activities that focus on peer-to-peer relationships and empathy. Several colleagues have now adopted these restorative practices.

The Mathematical Association of America has described Americans’ struggle with math as “the most significant barrier” to completing college degrees, particularly STEM degrees. I am committed to breaking that barrier, especially for underrepresented students. Mathematics should never be a gatekeeper: it should open doors for our students, not close them.

Perhaps our most celebrated metric is the number of students who graduate as confident mathematicians, equipped to pursue their individual aspirations through optimism and perseverance. My students evolve into mathematical citizens who reason with data, justify using logic, and value productive struggle. They understand struggling in mathematics is no more the enemy than sweating is in football: it is proof you are in the game.



3. Describe specific ways in which you deliberately connect your students with the community. Show how these community connections dissolve classroom walls and are used to impact student learning and success.

As we continue to navigate a changing pandemic landscape, our students' cry for mental health care has pierced our hearts. Their mental health is a top priority in today's classroom and beyond, particularly in Oklahoma, which ranks 6th highest in the nation for children with an Adverse Childhood Experience score of 2 or more. Education must transcend classroom walls.

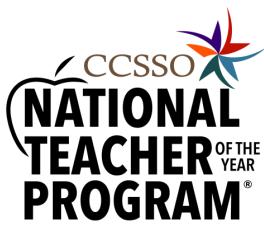
In addition to implementing trauma-informed practices, I bookend each week with lessons to connect with ourselves: Mindful Mondays and Free Write Fridays. Mindful Mondays jump-start the week with breathing techniques that help students pay attention to, rather than be overpowered by, their emotions. Free Write Fridays encourage gratitude journaling and self-reflection.

Eleven years ago, I began teaching at a large urban high school. This teaching experience differed vastly from my previous classroom experiences: here the needs felt endless and overwhelming. How could I address all these diverse, intense needs and still maintain my own mental health? I encountered a blog called "One Good Thing" that saved my career. This blogging community is a collective of teachers who live by the mantra "Every day may not be good, but there's something good in every day." I committed to writing something good in my classroom each day. While difficult at first, this habit of finding the good eventually became my lifeline. I have now written and published 1,400 posts. I currently administer the blog and share this life-giving practice with my students through Free Write Fridays. To demonstrate this practice beyond the classroom, I send parents and guardians of all 120 students a celebration letter about their student.

The practice of writing about the good has transformed our community:

- Past students say they continue this impactful journaling practice into adulthood.
- My former students who are now teachers practice Free Write Fridays with their students.
- In a replication of my celebration letter, every teacher in my school now calls their homeroom roster to ensure all 3,100 families receive a warm welcome to the new school year.
- Several students collaborated to create "One Good Thing, Student Edition Blog," where they now collectively write the good they see in their community.

Once we find the good, we are called to share the good—even if it sometimes feels impossible. Three years ago, a former student was incarcerated for murder. This tragedy led me to find ways to support incarcerated adults. I joined the Prison



Mathematics Project, a national program that connects inmates with someone who can support them in mathematics. Currently, I pen pal with an inmate, "Jill," who is 50 years old and has served 24 years of her 29-year sentence. A seamstress and aspiring entrepreneur, she hopes learning more mathematics will help her open her own sewing business and allow her to tutor her grandson with his homework when she is released.

Mirroring this connection, a fourth-grade teacher in my district and I partnered to create a pen pal program between our students. Allowing my students to step into the role of community mentor has been life-giving for everyone involved: each month, my students motivate their fourth-grade pen pals in their math—much like I do with Jill—and encourage them to find the good. Every community benefits from intentional intergenerational mentorship and connection. A student in this program said:

"The community and 'family' we built in my AP Calculus class was the most rewarding classroom experience I've ever had. When I look back on this, I attribute the joy from writing to fourth-graders to this classroom dynamic I loved so dearly because I wanted them to have the kind of classroom community I had. This is still instilled in me today, as I find myself seeking out similar connections and experiences in my life."

This is how we impact the world: in a culture that desires everything immediately, we must teach our children to develop practices that foster awareness, compassion, and gratitude. To impact their community and cultivate belonging, they must recognize that change requires dedication, reflection, and listening. Change happens when we choose to do the next right thing. This is the practice of joy. In all of our writing spheres, my students and I have learned that joy is not binary. Joy can hold it all: beauty and sorrow, success and failure, the tension between what is and what should have been. Joy insists on the good, the true, and the light having the final word... ...beyond Room 2704.....beyond the halls of high school... ...beyond our own corner of the world.

4. Describe a time when you grew as a teacher leader and life-long learner as a result of being an advocate in your school, state or beyond. Describe your advocacy, how it helped you grow and how it impacted students.

I tapped the arrow on the voicemail again and heard the department head say, "You just saved his teaching career." As Oklahoma's teaching ambassador, my role should elevate the teaching profession. Reflecting on what defines me as a teacher, I intersected my foundational practices of holding students' stories and writing about the good in the classroom to launch the Teachers of Oklahoma campaign. I listen to teachers' stories, learn from their classes, and write about their work. With the help of the Oklahoma State Department of Education, my posts of these teachers' stories of hope, tenacity, and creativity are published on social media and on a full-page ad in their hometown newspaper.



My goals are:

1. To educate those outside the classroom on the important work of teachers, and to inspire them to take ownership of teacher morale.
2. To honor every teacher in Oklahoma—those nominated and those who see themselves in the stories—and thereby increase teacher efficacy and retention.
3. To ensure each Oklahoma student is taught by highly effective teachers who choose to remain in the profession.
4. To grow and learn through observing the nominated educators.

My aim is to reach all 77 Oklahoma counties. By October 28, I had visited 20, traveling 10,000+ miles to listen, learn, and document. The opening sentence—along with the continual influx of nominations—shows we are already feeling the impact of Teachers of Oklahoma.

Oklahoma is facing a push to privatize public education. While I support parent choice, I believe states must adequately fund public education so that every student, parent, and guardian has equitable access to arts, athletics, advanced courses, and clubs. Engagement is crucial to student success. Unfortunately, a tactic of many pushing privatization is to dehumanize public school educators. This troubling rhetoric has further pressured an overburdened teaching force, causing educators to flee at alarming rates. Oklahoma has approximately 30,000 teachers who pay to keep their teaching license active but do not teach in Oklahoma. Since June 2022, Oklahoma has issued 3,593 emergency certificates. In 2011 we had 32.

Nationwide, 570,000 educators have left public schools since the pandemic, and more than half report wanting to quit. As a nation, we must take ownership of teacher retention—to ask ourselves, “What can I do to help teachers I know?” As I interview educators, I ask how we can retain and recruit teachers. Unequivocally, they say we must elevate the profession and restore it to one of mutual trust and respect.

Physicists have taught us that particles at the subatomic level move when they are seen: the mere act of bearing witness changes their trajectory.

It is time we bear witness to the educators across this country.

It is time to reclaim our profession.

I reclaimed my profession by bearing witness to the good, by learning from that which taught or brought me joy—living out my Iranian middle name, Mozdeh: “good news.” I wrote exactly 1,400 (700 doubled) posts of good news, which led to a campaign to honor 77 teachers in a state that serves 700,000 public school students. The number 7 signifies completion. As a mathematician, I feel a perhaps-divine nod that this work



matters. That first blog post, an act of self-preservation, is now a catalyst for a statewide campaign—a banner of good news—which may save more teaching careers.

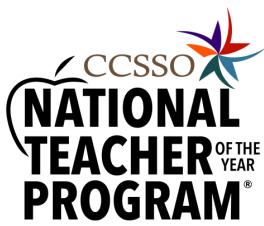
The ripple effects of “One Good Thing” were far wider than I anticipated. Likewise, I hold the hope that the impact of Teachers of Oklahoma will continue beyond me as we honor teachers. Research shows that collective teacher efficacy is the number-one factor influencing student achievement, with an effect size of 1.57, making it more than three times as powerful and predictive of student achievement as socioeconomic status (Hattie, 2016). The mission of Teachers of Oklahoma—celebrating educators by bearing witness to their cumulative stories—is harnessing the power and promise behind this research. The exponential growth that occurs as Oklahomans share these stories impacts collective teacher efficacy, which in turn influences students and their communities. As one teacher wrote, “The campaign has brought focus to the positive happening in Oklahoma education. You are achieving your goal.” I am working toward celebrating these teachers’ stories so loudly that any negative rhetoric is but a whisper. When we take the time to learn each other’s stories, we carry a piece of one another within us. As I sit with each teacher, I carry them with me. I learn from them. I am inspired by them. I am—at the subatomic level—changed by them.

- 5. As the 2023 National Teacher of the Year, serving as the ambassador of education for the United States, you have been asked to give a speech to a large audience of teachers. This speech is being recorded and will be shared broadly with a larger audience. What is your message? What is the talk you give? [You may indicate a specific audience. For example, a “back to school” talk.]**

When I consider my message to you, America’s teachers, I return to the first two words my parents made sure I learned in the English language when we immigrated to America: “thank you.”

As a quiet young girl who spoke very little English, you taught me to read—phoneme by phoneme. You never referred to me as a language learner. Instead, you told me I was linguistically gifted. I held tight to your words and wore them like a shield. When others laughed at my mispronounced syllables or made fun of my last name, I remembered your words: “Your diversity makes you beautiful.” Those unkind actions of others didn’t pierce as deeply as they could have—your words my shield.

A few years later you saw my love for patterns and relationships. You whispered, “Rebecka, mathematics is your superpower!” This time, I took your words and wore them like a cape. The cape gave me the power to soar high—so high that the rhetoric of “math isn’t for girls” barely hit my ears—your words my protective layer.



Then, one day, a new melody emerged from you: "I think you should be a teacher." These words were a song in my heart that rang true the moment you uttered them. You continued to sing these lyrics to me when my memory failed: when I didn't think I had what it took, when I felt too overwhelmed to continue. Collectively, you walked with me, reminding me that there's no such thing as someone else's child.

Now as one of you, I watch as you teach our students that math is not only about finding the right answers, but about celebrating all the different ways we can solve a problem. I observe as you teach our students how to express their feelings with words instead of fists. I marvel as you teach history lessons. on the repercussions of using fists over words. I lean in as you lead science experiments that invoke our students' inherent spirit of inquiry. I stand witness as you guide them in the arts, inspiring awe in our next generation.

What a gift you are to our country.

You lead our students to become the best version of themselves. Every day you teach the value of asking more questions, igniting our students' innate curiosity. You illuminate that ever-important lesson: the future belongs to the curious.

In return, you are remembered years—even decades—down the road.

I know we do not always get it right. Sometimes, our over-burdened hearts make mistakes, but... ...on our best days, we hold our students.

On our best days, we believe viscerally in the equalizing power of public education to dismantle marginalization, eliminate systemic inequities, and end generational poverty. Teachers, you hold our democracy. Education equates with freedom—a freedom not available to every child on this earth. As an Iranian-American woman, I am acutely aware that freedom through education and equal rights for us all are not guarantees. Rather, they are the product of a nation's people insisting that we belong to each other.

Teachers, you are the ones carrying that banner.

You are carrying our mission that everyone belongs and is worthy of a high-quality education—no matter their skin color, gender, or zip code; no matter their socioeconomic standing, immigration status, religious affiliation, or sexual orientation. Our diversity is our strength. All are welcome. Every voice gets equal representation. That is the heartbeat of our country, and we as teachers safeguard that every day, because... on our best days, we hold our students.... ...and.... ...if we are lucky enough.....we find they hold us, too.



At our best, we shine a light on the truest, kindest, most beautiful version of our students' lives. At their best, they reciprocate and reveal what science taught us long ago: light cannot be contained or captured —it must be reflected.

Students, you are our joy. Thank you for showing us what a privilege learning is and for trusting us to guide you.

Teachers of America, my message to you has and always will be “thank you.” As a child, I learned from you, believed in you, and walked alongside you.

I still do.

I love who I am when I am with my students, when I am part of your collective. It is the honor of my lifetime to walk with you and for you.

The words my heart carries are: “I slutändan kanske vi alla bara går hem till varandra.”
“In the end, maybe we’re all just walking each other home.”