A Math Classroom's Identity: How emphasizing the value of thinking over everything else changed a middle school math classroom By Ginny Hofferber 6th Grade Math at Miller Middle School Durango, CO

Cultures of Thinking in Action Fellowship gave me the amazing opportunity to improve my practice in ways I didn't know were possible. Since I began teaching 12 years ago I have been searching for the best ways to get students excited about math and reach the students who, for years, have thought they "weren't math people." Over the years I have tried and abandoned many philosophies including flipped classrooms, hybrid teaching, and self-paced proficiency ladders. Last year, in my work with our instructional coach and through a professional development course offered in the summer, I was introduced to visible thinking routines. Introducing these into my practice was just the tip of the iceberg as my classroom transformed into embodying thinking as our identity.

I started the year using visible thinking routines as activities to do with students. Through the course of the fellowship and the work we did together both as an entire group and as school teams, the cultures of thinking became part of our classroom identity. Every lesson designed, every instructional move, every seating arrangement, and every expectation embodied cultural forces and mindsets of culture. Through collaboration and engaging in the thinking moves together as a fellowship, I was able to implement, try, fail, and learn with like-minded people.

In my personal practice, I always struggle with the word "understanding" when it appears in the Common Core State Standards. As I experienced the thinking routines and engaged with the other fellows I began to make the connection between cultural forces, building understanding, and making thinking visible which translated to my practice. I also have always valued thinking and have been searching for ways to embed thinking into everyday lessons, the Power of Making Thinking Visible gave me the tools and the work with our Cultures of Thinking Fellows gave me the confidence to try and the space to reflect.

Throughout the year we engaged in routines and structures which empowered me to create a classroom where understanding is key and thinking is valued. Every day we use the understanding map by linking daily objectives, plans, and lessons to the ways we build understanding as mathematicians. I plan with the lens of content development along with the ways I want students to think and build their own understanding. I am mindful of the routines that we will use and the types of questions I will ask to prompt and cue students into building their own meaningful understanding of the math we are studying. I use "street data" to make shifts in my practice at the moment. I play with changing seats, displaying thinking, and focus on how I want kids to document their thinking. The fellowship provided the time and space to reflect on the results with our colleagues and continue to refine my practice.

As a result of this transformation, I began to see results. One example of the positive impact of creating a culture of thinking in the math classroom is about a young lady named Valerie (name changed). I had the privilege of teaching Valerie who received both ELD and Special Ed services this year. She was in one of my most diverse classes where I struggled to get them to think and engage in the tasks I created. At the beginning of the year Valeria struggled to get started on any work given to her and needed constant reminders to stay on task, engage, and complete work. As our classroom shifted from a math classroom to a thinking classroom, Valerie began to feel more comfortable and confident in the classroom. She was given the tools and resources to start and felt comfortable sharing thinking. The transformation to a classroom where thinking is valued gave her the confidence to speak her mind. As we finished up the school year Valerie ended the year scoring close to proficient on all assignments with little support, coaching her friends and classmates in getting correct answers, and jumping in to solve any problem at hand. Her growth in classroom participation and work completion alone was exponential.

This year my practice has changed for the better. I lesson plan with math content that the students will be learning about and also the thinking students will engage in to build that understanding. My classroom environment is purposefully set up to promote thinking. I strive to empower and engage students in their learning while questioning the roles of teacher and student. As I consider next year, I want to continue to work in the mindsets of Cultures of Thinking in Action and the micro moves and macro changes I can make to my classroom. I am thinking about trying increased vertical thinking opportunities for students, new seating to promote thinking (with the lack of furniture), new resource adoption, and playing with the power of documentation. I want to create spaces that highlight the messiness of thinking and the process of thinking and also consider the more permanent documentation that lives on the wall and shows where we are at any given moment in time. I want students to realize how valuable their thinking is even if it's not done because really when is thinking truly done? As a school, we want more to be purposeful and focussed on increasing student engagement. We are exploring and brainstorming ways to empower teachers and learn from one another so that we do the same for our students. Our entire Instructional Leadership Team for the upcoming year is grounded in the lens of being lead learners. I plan to bring some of my learning from the fellowship as a framework and opportunity to accomplish success for ALL students who come through our doors.

