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Final Research Paper

“Your Room Smells Like Feet”: Teaching Yoga in a Middle School

Research Question: What happens when middle school students participate in an in-school yoga, mindfulness and meditation intervention?

Sub-Questions:

- How do students utilize mindfulness and breathing techniques outside of the in-school intervention?
- How do students' energy levels and mood change throughout yoga, mindfulness and meditation?
- What happens to my relationship with the students that attend yoga intervention?

Rationale

Throughout my ARLI research last year, looking at how to close the achievement gap of African American boys, I spent a lot of time looking at our school's behavioral system of demerits, referrals and detention. This was a very eye opening experience as I noticed a handful of trends. First, it was not surprising to me that boys received a disproportionate number of demerits and referrals compared to the girls. Boys being punished more severely, particularly boys of color, is a national trend and unfortunately, my school was no exception. Second, there was a huge discrepancy in the number of demerits and referrals written by teachers. There was also little continuity across the board for what constituted a demerit. Some teachers hardly ever wrote students up where others would give demerits for things such as “farting too loud.” I found that as I started studying my own write ups, I became more aware of them and started to question whether certain off task actions truly warranted a demerit and if the write up actually changed their behavior for the positive. In addition, I instituted a positive behavioral incentive system in my classroom. Between both of those, I drastically reduced the number of demerits and referrals I wrote and saw a huge improvement in classroom behavior.

One of the greatest conclusions I came to last year was that our ladder of consequences did not reduce the number of demerits and referrals, which seems like it is defeating the ultimate purpose. If we issue consequences to try to improve behaviors and if behaviors continue or even escalate, at what point do we stop to reevaluate the system that is in place? This started getting me thinking about what could possibly change in our behavioral system.

This year, by October 21st, there had been 1,809 demerits entered for behavioral issues. There had been 154 referrals written. Every time a referral is written, that student is sent to the Dean's Office for the remainder of class, which means there are 154 instances in which a student's behavior caused them to miss out on class instruction. This number has steadily increased from week to week. If split evenly amongst our student body, each student would have approximately seven demerits. But as you can imagine, it is far from equally distributed. For example, one student has 14 demerits and 23 of the 154 total referrals. If the same students are having the same problems repeatedly, we need to intervene with strategies that teach students stress resiliency and management, how to regulate their emotions, and address the trauma frequently experienced by our student body. If only there was an ancient practice, growing in popularity and gaining the endorsement of many researchers that could do all of those things... Oh wait! This is something I know very well.

Though I will go into this in more detail later, yoga saved my life. I believe that if yoga can help in my life, then it can make an impact on the lives of my students. Yoga teaches resiliency; it teaches strength and flexibility (both physically and mentally); it teaches emotional regulation. I truly believe yoga is the key to transforming the lives of my students and shaping the culture of our school. This is the story of my (unfinished) journey bringing yoga into a middle school.

School Context

I teach at the University of Chicago Woodlawn Charter School, which is a neighborhood charter school. It is one campus of the University of Chicago Charter School System (UCCS) serving students in grades 6-12. Founded in 2006, University of Chicago Woodlawn (UCW) is one of three campuses that creates a "superhighway" to educate students from Pre-K through 12th grade. We boast a 100% college acceptance rate and create a college going culture at every grade level. The other campuses are Donoghue and North Kenwood/Oakland that both serve students

in grades Pre-K through 5th. UCCS is a branch of the Urban Education Institute (UEI) that consists of three other parts: the UChicago Urban Teacher Education Program (UTEP), the UChicago Consortium and UChicago Impact. The UEI aims to bridge educational research and practice to foster greater equity and excellence in public schooling.

UCW is situated in the Woodlawn neighborhood at 63rd and University, just south of the University of Chicago. Although the school is just blocks from one of the most prestigious universities in the US, it is a different world. Much of the infrastructure of Woodlawn was created in preparation for the World's Fair in 1893 hosted in Woodlawn's Jackson Park. The failure of economic growth was realized in the years following the fair.

What was once a predominantly white, middle class population slowly began to change to a mostly low income, African American community. In fact, by 1990, the population was 96% African American. The present day community remains predominantly African American, although many residents have started to experience the effects of gentrification as plans for the Obama National Library have been slated to open in Woodlawn. Until April of 2019, Woodlawn was also lacking a local grocery store, a problem common in many urban cities. To many residents' delight, a Jewel Osco opened about a year ago, making it the first grocery store in the Woodlawn community in over 40 years. On Saturdays, you can even find a tour bus bringing a wide eyed audience to tour Chicago's notorious "South Side."

UCW was formerly housed in the old Wadsworth school building until a new building was erected and into which students and staff transitioned to in the Winter of 2018. The old building remains a vacant shadow in the backdrop of the new building. Although the new building was supposedly designed as a school for a growing student body, there was a significant decrease in the number of classrooms and the size of each room that left staff members questioning who designed the building. Smaller lockers and fewer classrooms have caused teachers and students to adjust and has resulted in some teachers sharing classroom spaces or moving from class to class with a cart. It can be frustrating to both students and staff.

This year, we welcomed a new director for both the middle school and high school. Our former middle school director had been there for many years so this was a big transition for both staff

and students. Along with the new director, there was an unusually high rate of staff turnover with eight staff leaving mid year. This left eighth grade without a math and science teacher for the majority of the year and seventh grade without a math teacher. This has had a drastic impact on behavior and academics for students.

The building, which is officially owned by the University is now under different facility management. Though we have been in the building for only two years, it is already showing significant signs of wear and tear that are not being addressed. Our new director puts a lot of value on wall culture in classrooms and the hallway, so throughout the year, this has been gradually changing with mandatory student work walls, student spotlights and new bulletin boards going up. There is also a strong college going culture present in college flags, banners and inside teacher's classrooms and the hallways.

The middle school and high school are split by floor and there is little mingling of the two schools throughout the day. The middle school population is 251 students. Over 96% of our students identify as African American with the remaining identifying as mixed or biracial. 84% of our students receive free or reduced lunches. With the recent phasing out of Carter G. Woodson Middle School, as predicted, the student body is growing. UCW is now the only middle school option if students choose to stay in the UCCS network. This year, there was a push to increase enrollment which resulted in 17 seventh graders that were new to the school, some starting on the first day and many others straggling in throughout the first handful of weeks. This made the beginning of the school year more challenging than previous years as the new students had to adjust to a new environment and the teachers were constantly trying to keep those enrolled later caught up with the content from the beginning of the year.

The increase in student population was seen throughout the 2018-2019 school year and continues to the current school year. In order to meet the needs of so many students, 7th grade is broken into three cohorts of 25-28 students. These cohorts travel from class to class together. Students in all grades have four core content classes: Math, Literacy, Science and Social Studies. Depending on the grade level, students also have access to enrichment classes such as Social Justice, Brainstem (a science-math fusion class), Performing Arts, Spanish and various content labs.

UCW created a unique system during the 2018-2019 school year called Tribes. Tribes has continued for the second year. Tribes are modeled off of several different House systems (similar to the Harry Potter houses). The creation of this system is an attempt to build school pride and culture, something that has been an area of growth in previous years. There are six different Tribes in which students are placed after taking a survey that identifies their learning types and strengths. I am in the Pranda Tribe which focuses on performing arts and productions. Tribes collectively earn points each week based on many variables including attendance, behavior, academics, and teacher discretion. Each Tribe has approximately 40-45 students and three to four Tribe Advisors (teachers).

Tribes initially met five days a week with a focus on developing skills associated with their learning types and strengths and functioning as somewhat of an advisory. At the start of second semester, due to challenges with implementation, Tribes moved to only twice a week. Though the intention behind tribes is positive, the daily practice of it does not necessarily go as planned. Small classrooms, a high turnover of staff, a lack of buy in from staff and other factors has made this system more burdensome at times than helpful.

The middle school uses a ladder of consequences for its behavioral system that includes a warning, demerit, and referral to the Dean's Office if the behavior is not changed. Teachers are expected to follow the ladder of consequences and enter in demerits for anything from a shirt not being tucked in, to a cell phone being visible, or a disrespectful interaction with peers or teachers. All of this information is logged into an online database. If a student acquires three or more demerits, they are required to attend after school detention. If they do not attend detention, they are held in in-school suspension for a half or full day. If a student receives a referral, they are sent to the Dean's Office for the remainder of that period and are required to attend lunch detention the next day. Many of the systems related to the Dean's Office are inconsistent this year and have left teachers in the dark about what consequences were being issued. Many teachers felt that this inconsistency led to an increase in behavioral issues and were frustrated to find that students sent to the Dean for disruptive behavior would be sent back to their room shortly after. The behavior of eighth grade students became so egregious that they lost many privileges and were forced to be walked in lines from class to class.

The Dean's Office is trying to change to reflect more restorative practices. We initially tried to implement the Calm Classroom curriculum but it was not used with fidelity throughout the year. We consistently see more boys in the Dean's Office than girls and data shows that middle school boys have a much higher rate of behavioral infractions, particularly for the loud/rowdy category. Boys also top the charts for the number of In School and Out of School Suspensions. Two years ago, as part of the charter contract renewal, UCW was challenged with decreasing the number of suspensions. I do believe our rate of suspension has decreased, however anecdotally, I have not seen an improvement in overall student behavior. If anything, this year felt more chaotic than years past.

Teachers are given the discretion to create and use any additional behavioral systems in their own classrooms. Last year, I created a system, though used inconsistently, to offer an added step between receiving a demerit and being referred out of the class. Students could be asked to take a break in the hallway where they had four choices of activities to complete including physical movements and reflective options. I also continued using a positive behavioral intervention system called ClassDojo, an online system that allows teachers to add or subtract points based on teacher identified behaviors and values. Lastly, I introduced a standing table in the back of my room to support students that felt antsy or tired. Students could move to the table without consequence to get themselves back on track. Those systems were all developed as a part of my ARLI research from last year and were found to have a positive impact on my classroom culture. This year was the first year that behavioral management felt easy for me, much of which I attribute to these systems.

UCW has a very strict grade level retention policy. If students fail four or more of their core content classes over the two semesters, they will not be promoted to the next grade. The reasoning behind this is if a student is failing more than half of their core classes, they have not displayed mastery of the skills necessary to be successful in the next grade level. There are little to no supports for students that are repeating grades. It appears that the assumption is that students will be more successful the second time around, which is far from the reality. When discussing failing grades, it is important to note that historically and up until part way through this school year, UCW did not use D's in their grading system. Any grade below a 70%, was an

F. One of the changes that our new principal implemented was adding D's back into our grading system in order to increase our data around grades for the School Quality Rating Policy.

Grade level teams, made up of a team leader and the other teachers in a given grade, work together to support students. Though grade level team meetings meet far less frequently than in years past, these meetings are spent establishing grade level norms, addressing concerns about specific students or cohorts, developing individual student action plans, and other issues that affect the entire grade. This is a sacred time where teachers can productively vent, hold each other accountable and create a standard so that the seventh grade team is seen as one indivisible unit. This year, when the seventh grade team leader left in November, I was asked to step into this role.

The Social Studies department does not use any specific curriculum. The three Social Studies teachers, one for each grade, pull resources from various textbooks and websites to build their content. Each Social Studies teacher has a specific historical timeframe that they are responsible for covering. In seventh grade, I teach from Early Exploration through the Civil War. Much of my content comes from websites such as the Howard Zinn Project, Teaching Tolerance, Facing History, A Young People's History of the US and other social justice centered texts. In seventh grade, students are also required to pass a test on the Constitution of the United States as a grade level promotion requirement. This test causes much anxiety, although students are often shocked by how easy it is if they study. Last year it gave me so much joy to be able to announce to one entire cohort that they all passed on their first attempt.

I have found creating my own curriculum to be both a blessing and a curse. The amount of time it takes to create a rigorous, social justice oriented, relevant historical curriculum should not be underestimated! However, having the support to teach what I consider to be a "true history" is something that I know can be rare, and I am forever grateful.

It seems only appropriate to end this section of my paper with something that all ARLI fellows share in common this year: the impact of Covid-19 on our school year. On March 13th, Illinois Governor J.B. Pritzker and Mayor Lori Lightfoot announced that in person learning would temporarily cease as a part of larger stay at home order to minimize the spreading of

Coronavirus. All schools in Illinois were forced into a remote learning situation. Without any training, advanced preparation or the knowledge that this would actually extend for the remainder of the 2019-2020 school year, we saw our students one last time on March 16th, 2020. Unlike Chicago Public Schools, we started remote learning the next day. Though we didn't skip a beat getting started, it is still very clear that this pandemic has been irreversibly damaging to our students as the inequity of online learning has been brought to light. To date, we have distributed several hundred laptops to families across our school network however there are still many families who do not have access to the technology necessary for remote learning. As a school, we have discovered that our knowledge of our student's home lives is inadequate and has left us scrambling at times to figure out how to best support them. We have managed to create a system that provides a fair re-creation of the school day; however it is still far from ideal. Not only does this pandemic impact student's education, it has also brought much of my data collection for my research this year to a standstill. It has left me feeling as though I am telling an incomplete story and fearful about what school will look like for the 2020-2021 school year.

Literature Review

Yoga is More Than Expensive Leggings

Yoga is an ancient practice that has been used across the world for over 5,000 years. Yoga, a word coming from the sanskrit language meaning "to yolk," combines three things: breath, movement, and meditation. Though its history, starting in India, is rooted in Buddhism, Hinduism and various other written scriptures and offers the ultimate goal of reaching enlightenment, the yoga practiced in the United States is usually void of these aspects of the practice. The most you will receive in a traditional yoga class is the use of sanskrit for some poses and maybe a simplified reference to the yamas and niyamas, a part of the 8 limbed path towards enlightenment. Yoga in the United States has veered drastically from its origins but continues to grow in popularity. More than 15 million Americans use yoga as a part of a healthy lifestyle (Eggleston, 2015). Yoga has become synonymous with things like hot yoga and companies like Lululemon, where a pair of yoga pants can be purchased for anywhere from \$80-120. The cost of a single drop-in class at a common yoga studio in Chicago is \$26. As you can imagine, this has created significant barriers for many different populations to access yoga. As one study found, "Yoga and mindfulness techniques are increasingly being used as tools to reduce stress and enhance wellness in various populations with different health concerns. Studies

document the effectiveness of yoga and mindfulness in reducing psychiatric symptoms and improving attention and concentration” (Fishbein, 2015). In a world that only seems to be getting more stressful for all populations, it should come as no surprise that many people are clamoring to this ancient practice for relief from their woes and ailments.

“Divine Intervention” and My Research

My path to becoming a yoga teacher is not unique but is one of the most important moments in my life because I can truly say that it saved my life. Yoga is something I had tried on and off throughout high school and undergraduate college but never took too seriously. In 2013, I hit a very low period in my life. Due to a variety of life circumstances, I found myself taking a break from graduate school because of crippling anxiety attacks, depression and self harming behavior. With what felt like the world crumbling around me, I walked into a yoga studio to try a class and left signed up for yoga teacher training. It was as close to destiny as I have ever felt. Within six months of doing yoga consistently and becoming a 200 hour Yoga Alliance certified yoga instructor, I was off of all medications, had re-enrolled in my graduate school program and was getting myself out of toxic relationships. Yoga worked. I knew my calling to become a yoga teacher was not to teach at a studio overcrowded with white upper-class women wearing the latest designer yoga clothes. I wanted to bring yoga to communities that really needed to experience the vast array of benefits that would not typically have access to it. True to my intention, my first yoga class I ever taught was to a group of women who were incarcerated in the Cook County Jail. Later, I taught yoga as an elective class to sixth-eighth graders at UCW the first year I taught there. Students who elected to participate in yoga attended a 60 minute class once a week. Elective classes were replaced the following year and I spent my second year without teaching yoga at UCW. This also happened to be the first year I started Action Research through the ARLI Program. I focused on how to close the “reception gap” for African American boys and started to criticize our school’s punitive behavioral system. I found that our current ladder of consequences, which includes demerits, referrals and detention, does very little to actually *change* student behavior. It disproportionately punishes male students and does not address the trauma experienced by my students or teach any skills for things like stress resiliency or emotional regulation. When deciding what topic to research for my second year with the ARLI program, it was a pretty easy decision to jump on board with the growing number of schools that are incorporating aspects of yoga, mindfulness and meditation into their school day.

A Small but Mighty Body of Research

Actual quantitative research to support yoga in schools is minimal but appears to be growing as this becomes a more common practice to address the needs of school aged children, particularly in low income communities of color. A principal at an elementary school in Syracuse, New York found, “when you have high poverty in a district, that brings chronic trauma from students’ life experiences, mindfulness changes the environment in the classroom. Kids can talk through their emotions instead of yelling and fighting and causing more trauma” (Zalaznick, 2018). So often in schools, the punishments for disruptive behaviors are re-traumatizing and exacerbate negative behaviors. My school is no exception to that. Yoga and mindfulness help students switch from responding from the highly emotional amygdala in the brain to the more strategic prefrontal cortex that is still developing in adolescents (Zalaznick, 2018). Through yoga and mindfulness, behavior can eventually become viewed as a choice rather than a reaction.

Yoga and mindfulness also provide a solution for low self esteem, perceived stress and the myriad effects seen in children and adolescents. Research for a yoga and mindfulness program in a suburban city engaged seventh graders in a 30 minute yoga and mindfulness class for 36 weeks. Using a control group, this program administered the Morris Rosenberg self esteem scale to all seventh grade students and saw stunning results for those that participated in the yoga class. “Students who practiced yoga significantly improved their self-esteem scores over time when compared to the control group,” they found. “While self-esteem scores increased over time, perceived stress decreased over time for the yoga group, but not for the control group” (Eggleston, 2015). As any educator can tell you, high levels of stress lead to low self esteem, physical health issues, poor academic performance and behavior issues in school (Eggleston, 2015). Throughout my time as an educator and after having lost many nights of sleep, I have finally come to terms with the fact that we cannot control the stressors that exist outside of our classrooms. But what we can do as educators, is to equip students with the necessary skills to help them build stress resilience to lower their perception of stress.

Considerations for Implementation

It is impossible to think about creating a yoga intervention program at schools without addressing the challenges of the implementation of it. At least at my school, we are notorious for having great ideas that fail because important details are overlooked which is often detrimental to

the program's sustainability. A study with three low income schools in Baltimore, Maryland that partnered with the Holistic Life Foundation tackled this issue. They stated, "high-quality intervention research cannot be conducted without consideration of issues of implementation in 'real-world' practice settings" (Dariotis, 2017).

They looked at four different themes when implementing a 16 week yoga and mindfulness program for fifth and sixth graders: program delivery factors, program buy-in, implementer communication with teachers, and instructor qualities (Dariotis, 2017). Being an outside organization partnering with the school, they gathered their research from student and teacher focus groups at the three schools. Their research showed that both teachers and students were satisfied with the content of the program which "aimed to enhance students' emotional and cognitive regulatory capacities through mindful yoga practices." The instructors of the non-profit, "used yoga-based body movements and breathing to promote mindfulness" (Dariotis, 2017). They also found that it was very important to address factors such as the timing throughout the day (students did not always like missing other programs such as art), the physical environment (lack of cleanliness and the presence of windows where other students could see into the room during yoga were common barriers) and the delivery of the program, including communication with teachers about program goals and expectations. One of their big takeaways from their research is that the skills taught in yoga need to be started earlier and need to be reinforced in order for them to be used by the students. "Teachers and students felt the program was not long enough to ensure internalization of program skills" (Dariotis, 2017). Some teachers suggested starting yoga and mindfulness as early as kindergarten while others suggested a need for it by fourth grade. Lastly, this research found that it is important for yoga instructors to be respectful and fair, to not yell a lot, and supported the instructor being a positive male role model. Being a male instructor was important to show an alternate approach to masculinity, something that our African American students are often not exposed to. The students appreciated the "let it be" mentality of the male instructor and made the assumption that a female instructor would be more bossy and wouldn't provide pizza. This research concluded that "regardless of race or ethnicity, instructors should be culturally competent in working with the target student population and knowledgeable about how to work with participants of the target developmental age" (Dariotis, 2017). Being white and female, I unfortunately cannot personally meet the needs identified from this school in Baltimore. I will however, continue to

push myself to be culturally competent working with my African American middle schoolers and will continually challenge how my privilege influences my work teaching yoga and mindfulness.

What To Expect When You Are Expecting... A Yoga Class in Schools

If there is one body of research related to the implementation of yoga that varies immensely, that is the idea of frequency and duration of classes. As mentioned previously, many people agree that yoga should be started earlier than middle school but as Eggleston (2015) pointed out, “the debate regarding the optimal frequency and duration of yoga in schools is one that is only beginning and needs further research.” Programs that I researched varied from 30 minute sessions once a week for 36 weeks, every day for 30 minutes, three times a week for 50 minutes over seven weeks, and 16 weeks for an hour. I was able to offer hour-long sessions once a week for the remainder of the school year as students started to be pulled from enrichment classes. With research on yoga classes in schools being relatively new, there is not data to support what frequency and duration are necessary to ensure that there are positive, lasting outcomes.

The content of yoga classes also varies from program to program but seems to have common threads amongst them. One alternative school for students in grades 9-12 offered a yoga and mindfulness program for students with the goal of determining whether participation in the yoga program could show “trends toward decreased alcohol use and improved teacher-rated social skills” (Fishbein, 2015). This randomized control study offered classes three times a week for 50 minutes. This program incorporated a weekly theme such as focusing on breath, stress, observing without judgement, awareness of thoughts and emotions, and cultivating positive emotion (Fishbein, 2015). They implemented the following structure to each class to promote repetition consistency: 5 minutes of an opening meditation or centering exercise, 5 minutes of stretching and gentle movements, 30 minutes of yoga postures and finally 10 minutes of a closing meditation ending with an affirmation of respect for self and others (Fishbein; 2015). Another school based program included “centering practices that encourage quieting the mind and present moment awareness, then active yoga-based poses, breathing techniques, guided mindful reflection, and brief discussions on health-related topics” (Dariotis, 2017). It is also important to note that in order for yoga to be taught in schools, it must be secular: all religious ties must be removed from the content. Though each yoga program has its own structure and content, all programs that I found include threads of breathing, movement (poses), and guided meditation.

Just as classroom teachers must be responsive to the needs of students, the best yoga classes are not determined by the experience of the teacher, but the teacher's ability to tailor the content to the needs of the students in the class.

Overall, with strategic planning for the implementation of a yoga and mindfulness program, this body of research strongly supports yoga in schools as an intervention, elective or after school program.

Research Implementation Plan

The idea and implementation of a yoga program went through several different iterations throughout the school year, which of course ended just as I had found the most practical and seemingly effective version. The first iteration started as an alternative to the usual punitive after school detention program. I got the support from my director and dean of students to begin teaching 30 minutes of yoga along with a 30 minute peace circle in place of the usual worksheets. After finding that collecting meaningful data from a group of students that changed from week to week would be very difficult and struggling to rely on the dean for the sessions to actually take place, I began to think about how to modify my plan. This, and a fortunate freeing up of teaching four class periods a week, led me to my second iteration: in school yoga interventions (though I continued with the after school detention as well). This second version required a lot of time spent identifying target students and finessing the schedule for student's enrichment classes to align with my free periods. This could not have been done without the support of the dean. After trying this version for a couple of weeks, I immediately recognized some factors that needed to be changed. This required even more support from the dean and many more hours figuring out how to make the schedule work. The last (and in my very biased opinion, best) version lasted only a few weeks before we moved to remote learning due to Covid-19. This last version is where I plan to pick up as soon as in school learning begins again. Each of these versions and the lessons learned from each one will be discussed at length.

Summary of Data Collection Methods

To support my year of research about yoga interventions, I used various data collection methods. Each method has been summarized below.

1. Teacher Journal: I maintained a journal throughout the duration of my research project. In my journal, I recorded anecdotal notes about yoga sessions, student comments, and reactions to different skills and content covered.

2. Student Surveys: 23 of the 29 students taking part in the in-school yoga intervention completed a pre-survey to gather information about their likes and dislikes, how often they feel certain emotions, what their current coping skills are and how they felt about being pulled from class to do yoga with me. This survey was designed to be followed up with a post survey, however due to the school closure, I only received only four responses through an online survey emailed out.

3. Mood & Energy Level Chart: For each yoga class, I had students track their mood and energy levels before and after yoga class on a small whiteboard chart with a magnet. As part of the pre yoga survey, students also identified where they would ideally like to be on the chart so I could also compare how they felt on any given day to where they would ideally like to be.

4. Behavioral Data: I tracked how many demerits and referrals each student in my in-school yoga intervention received throughout the year to see if the totals increased, decreased, or remained the same during the time when they were doing yoga with me. This data was again cut short.

5. Student Interviews: I performed one student interview through Zoom during our remote learning period. These would have been done in person had we still been in school and would have likely included most students in the yoga program.

A Journey in Flexibility

My year of teaching yoga can be ironically described as nothing less than a journey in flexibility. As I stated previously, my research as an ARLI fellow last year left me with a policy recommendation to teach students skills in stress resiliency and emotional regulation. When I was asked to return as a Senior Fellow, I knew right away that my focus was going to be integrating yoga into my classroom in some capacity. I was trained in trauma responsive yoga through the Prison Yoga Project in 2015. In 2018, I attended an 11 day workshop at the Kripalu Institute for Yoga and Mindfulness on teaching yoga in schools where I was trained in a Harvard

endorsed curriculum. I had also taught yoga as an elective to sixth, seventh and eighth graders during the 2017-2018 school year, so I had some experience. All of my experience was helpful when it came to actually teaching yoga and mindfulness, but it certainly did not prepare me for the journey of getting a program like this off the ground and running. A program that was supposed to reduce stress with my students often elicited quite the opposite in me. It was time consuming and tedious to figure out the schedule, frustrating when students were absent, annoying to have to rearrange my room so frequently, and disheartening when I saw students immediately engage in problematic behaviors following a yoga class. To top it off, my room smelled like feet almost every single day. If I had a dollar for every time I heard “Your room smells like feet!” I probably would have been able to invest in some better air freshener.

Despite the challenges, I would not change a single thing about how the year played out, except for, of course, the ending of in person learning due to Covid-19. Through every attempt and mistake made, I took away myriad lessons that I believe will allow me to create a sustainable in-school yoga program moving forward. We are often very quick to point out that the strongest moments of student learning is after making a mistake, but as educators, we often shy away from moments that could end in failure in our own lives. This is my story of failing and flexibly adjusting the schedule, expectations, and of course, my body.

The table below outlines the basic information about the three main versions of the yoga program I created as a part of my ARLI research. These will each be discussed extensively throughout the paper but have been summarized to give you an overview of the shifts I made to the program throughout the year. In addition to these programs, I also ran an after school yoga program that students elected to join once a week. Though most of my data focuses on these three programs, you will see some references to the after school yoga program as well.

Version	After School Detention Replacement (see pages 13-16)	In-school Yoga Intervention Version 1 (see pages 16-21)	In-school Yoga Intervention Version 2 (see pages 21-29)
Intended Timeframe	Every Tuesday after school for 1 hours (30 minutes yoga/mindfulness, 30 minutes Peace Circle)	1 hour per week for 8 weeks during my prep periods, would rotate through 3 groups of identified students	1 hour per week for the remainder of the school year, during my prep periods
Actual Timeframe	Inconsistently from September 25th- March 10th.	1 hour per week for 2 weeks (due to Winter Break) from December 17th- January 16th	1 hour per week until our last week in school. January 28th- March 16th
Participants	Selected by the Dean of Students as any student that had escalated behavior throughout the week that needed a different type of mediation (determining this process is still unclear to me)	Groups of 3-6 students, mixed genders, that were identified by the Dean and myself as needing additional emotional support. (Initially identified ~40 students)	26- 29 most urgent students to reach, separated by gender and grade level. 6th graders met by themselves, 7th and 8th grade were combined.
Location	Varied (Dance studio, Dean's Office, my classroom)	A combination of my classroom and other teacher's classrooms	My classroom
Takeaways	<ul style="list-style-type: none"> -Relying on the Dean to set up the detention was difficult -Couldn't track meaningful data about the impact of yoga and mindfulness from a group of students that was different each week 	<ul style="list-style-type: none"> -Maximizing the number of participants should not be valued over making a lasting impact, they are called yoga and mindfulness "practices" for a reason. -This is Middle School... separate the boys and the girls if you truly want their attention -Close the blinds -Try to teach in an environment that you can control (i.e. your own classroom) 	<ul style="list-style-type: none"> -Not everyone is ready to access yoga and mindfulness, it may not be for everyone. Don't force it. -Be prepared to welcome new students . -Don't teach yoga 1st period

Outline of the three different versions of yoga intervention and how they changed throughout the course of the 2019-2020 school year.

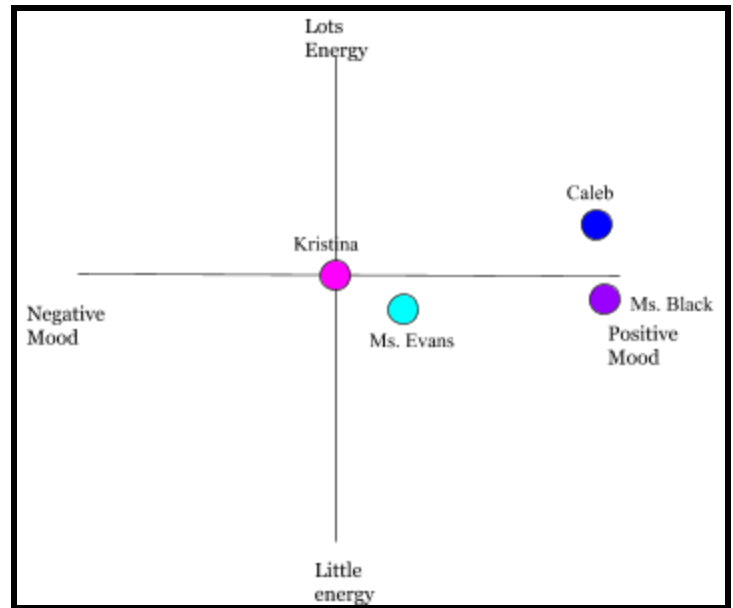
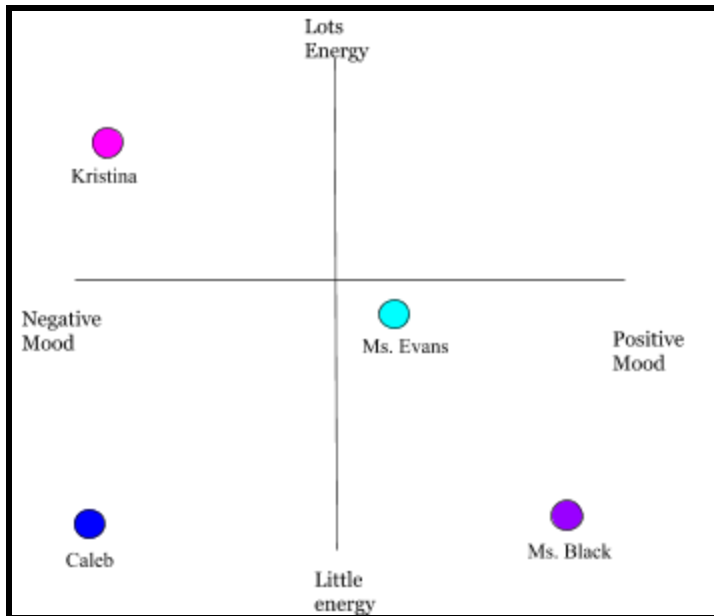
After School Yoga Detention Replacement

I had a plan to roll this idea of integrating yoga into detention ready to go for our first week of school when I received an email from our Dean of Students, Ms. Evans, shortly before school started asking if I would be interested in teaching some form of yoga as a restorative practice for detention. I was thrilled to already have the support from my administration and began the fall semester feeling positive. I just knew that replacing our detention system with yoga and mindfulness was going to make a huge impact. Little did I know the journey I was about to embark on.

Throughout the year, we held just under 10 after school detention sessions. The range of offenses that landed students in after school detention were anything from throwing food in the lunchroom to horseplaying/play fighting to running down the hallway pulling off all the positive affirmation post-its put on student's lockers during kindness week. (I know, hard not to chuckle at the last one). The size of the group ranged from two to 10 students. Depending on the size, we would either hold the class in the Dean's Office, the dance studio or my classroom. We loosely followed the format of spending the first 30-40 minutes doing yoga and the remaining time in a peace circle led by Ms. Evans. The peace circle consisted of some sort of story or article related to students that had the simple goal of getting students to talk. Often without realizing it, they ended up sharing their thoughts and feelings but in a way that felt accessible and genuine. I left every after school detention session feeling refreshed and I think students did too. On February 11th, after a session that contained several students that had taken part in a food fight, I heard Kayla whisper afterwards, "well that wasn't what I expected!" Students expected to be penalized for their actions and were taken off guard when they realized they weren't going to be attending an hour long lecture about making bad choices.

There are two particularly impactful sessions that I spent a significant amount of time analyzing in my journal that stand out because they both confirmed the importance of making this practice a part of our school culture. The first was the second after school detention that we held on October 15th. We only had two students in attendance, an eighth grader, Kristina and a sixth grader, Caleb. After we were done with the yoga portion of detention, we asked the kids to describe how they felt. Kristina said she felt "blank." My initial reaction was a bit disappointed when I heard that. Ms. Evans pushed her a little bit further and asked how she usually feels to

which she responded, “like a busy city.” Kristina went on to further explain that when she feels like a busy city, she reacts quickly to things that happen, but when she feels blank, she can respond from a more rational place and is willing to try new things.



This compares the mood and energy level chart before (left) and after (right) during an after school detention session on October 15th.

I also began to see a trend of students feeling generally more positive after each yoga class, and especially in this particular detention session. This was sometimes exhibited by data from the above chart and other times by anecdotal observations of improved mood or by students' eagerness to join me each week. One student, Andy, would ask me everyday if it was time to do yoga and frequently told me how much he needed it. As you can see in the graph above that shows the mood and energy tracker before class started on October 15th (right) and after class ended (left), both students and myself (I think Ms. Evans forgot to move her magnet) all indicated that we felt more positive than we felt at the beginning of class. It made sense to me that Kristina would describe herself as feeling like a busy city when I saw where she identified her mood and energy level. You can also see that her description of feeling blank corresponds to a significant decrease in energy level. While I think most would agree that feeling more positive is a good thing, it wasn't as easy to categorize what a “good” energy level was. I began to grapple with this concept and will go into this in more detail later.

The second after school yoga detention session that stood out to me was on February 25th. We had nine students in attendance that were mostly there for roughhousing in the hallway. It was a list of students that made me question how the yoga portion was going to go because they were the students that I frequently saw reeking havoc in the hallway. There was one student, David, who was a part of my tribe that I frequently had behavioral issues with and I was especially hesitant about how it would go with him. Since this was towards the end of the year, I had learned many lessons, one of which was that if the overall feeling in the room was pretty high energy, I simply increased the intensity of the class and didn't hold them in poses for quite as long, avoiding giving them time to lose focus and get off task. This usually worked in my in-school interventions and this day proved to work as well. They followed me through an intense flow which made them appreciate rest pose even more at the end.



Students from the February 25th after school yoga detention enjoying a rest pose after an intense yoga class.

We ended our session talking about roughhousing and how much fun it can be. It was such an honest conversation that led to students being able to name that school probably isn't the best place to playfight and they acknowledged that what sometimes starts as play fighting can easily turn into real fighting. This happened in a way that didn't make students feel bad and made me wonder if students like David might actually second guess smacking another student in the head

and running away as I so often see him do. I have watched and admittedly participated in many conversations with students about this same topic before, but in a punitive tone or ultimately ending in a consequence for the student that did not make logical sense. This session left me wondering if we could shift the way we handle students' off task behavior with more restorative practices such as this, we might actually see an improvement in the behavior and choices of students.

But this was not even the best part of this class! The next day in school, I was approached by David asking when he would get to do yoga again. In my journal, I noted the following interactions:

David stopped me in the hallway and asked when he was going to do yoga next. I explained that he was a part of detention but asked if he liked it and he eagerly said yes. I asked if he would want to be a part of my in-school group and he said definitely. I told Mr. Cha about this later and apparently he saw David and told him that he heard he did really well in yoga the other day. David said "of course I did. It was really fun."

The next week I pulled David for his first in-school yoga class and he did just as well as he did during after school detention. In my journal, I noted that he tried every pose, kept his hands to himself and was eager to do it again. This unfortunately was on March 11th and in person learning would cease just a few days later. I did, however, run into David outside of a grocery store during quarantine and in front of all of his friends, David asked if he could do yoga again whenever school started back. I'm not sure what kind of lasting impact those two classes had on David, but to have him excited about something related to school was a big deal. He is definitely on my list of students that will be continuing with me next school year.

Though these two stories may make after school yoga detention sound like a complete success, I want to point out that the biggest implementation challenge was inconsistency. As I mentioned initially, throughout the entire year, we held fewer than 10 sessions. This was by no means due to a lack of student behavior that required detention. Ms. Evans, though she was my biggest cheerleader, was being pulled in many different directions and she was being forced to spread herself thin. This meant that detention slips, which needed to go out the day before notifying

students of their required attendance, were often forgotten or the phone calls to confirm their attendance would fall through the cracks of a very busy day. There were many Tuesdays where I was ready to teach yoga only to find that the stack of detention notifications were still sitting on Ms. Evans's desk. I offered to make the phone calls or help in other ways, but was never taken up on it. I was also unclear about what behaviors actually warranted the need for after school detention.

The most important thing I did learn through this is that after school yoga detention can be a very powerful practice. If we can implement this with fidelity in the coming school year, I stand by my previous hope that this could be a very transformative experience for students' lives and our school culture. I am also grateful for the challenges that this program provided because it was a conversation with Sue Hansen over iced coffee at Bridgeport Coffee that helped me realize that this could not be the heart of my research for ARLI. It was too inconsistent with the frequency of classes and with different students in attendance each week. Based on this conversation and a little bit of scheduling luck, I was led to the next version of teaching yoga in school.

In-School Yoga Intervention Version 1

Just before the 2019-2020 school year began, I was more or less "voluntold" that I would be teaching a sixth grade academic intervention course using a computer program called iReady to support students in math and literacy. I was far from excited about this considering they took away my fifth period of Social Studies where I had started to plan a Current Events course.

Several weeks into the school year, I was informed that a new teacher had been hired with the intention of having her teach the iReady course and it would soon be taken off of my plate. After realizing the challenges with the after school yoga detention replacement and recognizing that I would not be able to get meaningful data for ARLI, I decided that this would be my opportunity to teach in-school yoga. Before anyone had a chance to tell me what was going to happen to my sudden opening of four class periods, I quickly reached out to Ms. Evans and asked her what she thought about an in-school yoga program. Without waiting for any of the details, she approved and said she would help me set it up.

Our first step was to identify the students that we thought would benefit from in-school yoga. Having knowledge of students is necessary for this step of implementation and luckily, I had

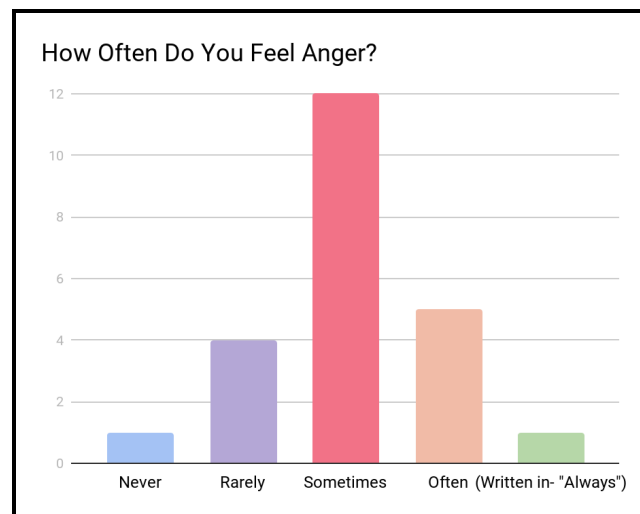
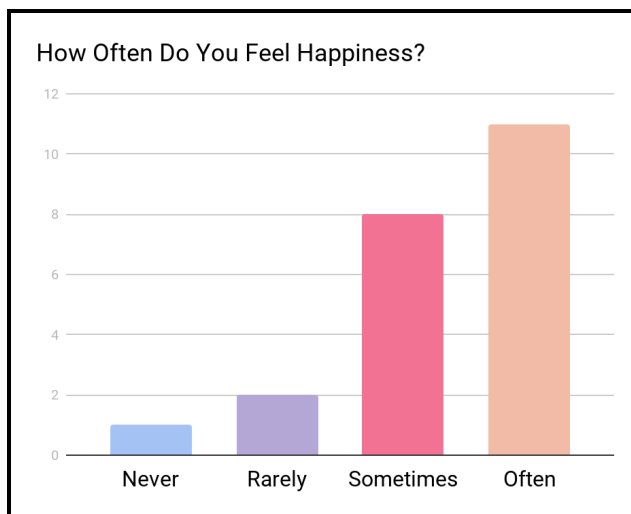
taught all three grades of students and Ms. Evans was very familiar with many of the Dean's Office "frequent flyers." Though many in-school yoga programs use instructors outside of the school, it is imperative to have connections with someone in the school who knows the students well in order to identify the students that need yoga the most. We identified students that had high numbers of behavioral infractions (see the table below), frequently got into fights, had challenges with making peer or teacher relationships, had experienced trauma, were extremely introverted, or had expressed challenges with mental health or self esteem issues. As you can imagine in a middle school, that left us with a lengthy list of over 40 students. To give some perspective on the students selected that had behavioral issues, the table below shows several of the students' number of demerits and referrals they received by October 21st, keeping in mind there was a total of 1,809 throughout the whole school. These students were selected in hopes of giving them self regulatory strategies to minimize behavioral infractions in the future. Remember, each time a student received a referral, they were sent out of class and missed valuable instruction.

Name	Number of Demerits	Number of Referrals
Sixth Grader	16	23
Eight Grader	21	2
Sixth Grader	15	9
Eighth Grader	20	2
Seventh Grader	38	1

A closer look at five students selected due to disproportionately high numbers of demerits and referrals during first semester.

With the sheer number of students that we had identified as potentially benefiting from yoga, we decided to break them up into three different eight week sessions. I would pull students once a week for an hour. The sessions would run from December 9th-February 10th, February 17th-April 13th, and April 20th-June 8th. We focused mostly on breaking up students by grade level and created mixed gender groups. Because my room was still being used for the class I was previously teaching, I had to move from room to room to teach yoga.

Though this version of in-school yoga only lasted a few weeks, it provided a strong foundation for the final version and also brought me very valuable data justifying the importance of this program. 23 students filled out a pre-yoga survey that taught me a lot about students' experiences. To put it simply, I learned that students needed yoga, and they needed it badly. The two graphs below show students responses to how often they feel two common feelings, happiness and anger. At first glance, I was pleased to see that the majority of the selected students felt happiness often. But as I looked more critically at that graph, I realized that 11 students *do not* feel happiness often, which is concerning. When examining how frequently students feel anger, I was particularly concerned about the right side of the bell shaped curve, especially for the student that wrote in "always."



This data shows the response from 23 students to two questions, “how often do you feel happiness and how often do you feel anger?”

Feeling anger is a natural human emotion and if I were answering that question, I probably would have selected “sometimes” along with the majority of the middle schoolers. What becomes important for those that selected “sometimes”, “often” and especially “always”, is what is then done with that feeling of anger. This is where I found students needed to learn skills to productively manage undesired emotions such as anger, anxiety and sadness. Below is a table with quotes from students about what they do when they feel those emotions. As you can see there are a variety of positive skills being utilized such as meditation, seeking advice, and

external and internal calming techniques. There are also a number of negative skills being utilized such as bottling up or suppressing emotions, lashing out, and shutting down. Being able to teach more of the positive techniques for dealing with undesirable emotions has the potential to drastically impact student's lives. I cannot control most of the factors that lead to those emotions, but through yoga, mindfulness and meditation, I can equip students with a toolkit of skills to respond in more positive ways.

Positive/Skill	Neutral/Mixed	Negative/Reaction
Breath, relax, and when at home I sleep. I just think about it and talk about it with someone I am not that angry because I can go home and talk to my mom about it I just take deep breaths and talk to myself and say calm down I try to chill and go to my happy place I try to count to 10	I just be quiet and try to hide it. Or I ask my friends what they think about it. I cry sometimes to let it out I just walk away or ignore people I will play with things I just play my game and eat	I take it out on others, but not anybody. Just the next person that does something irritating or extra. I take it out on everyone I put my head down or don't talk to no one. I go off but most of the time I try to listen to music Most of the time I be angry or get angry a lot. Or over something small I am stressed when I don't understand something and I'm anxious when I have to take a test I let my anger out Go to sleep

Quotes from the pre-yoga survey administered to 23 students when asked: "How do you respond to anger, anxiety and sadness?"

As I researched other yoga programs that were run in schools, every single one of them was taught by an outside organization partnering with a nearby school. The yoga instructors were new to the school community. As a teacher that had previously taught every single student that was a part of my yoga and mindfulness intervention, I quickly found that my prior relationships with students had an impact on their willingness to participate, either for the better or for the worse. I also entered into the intervention with some assumptions about how students would

respond to yoga, based on my previous experiences with students. This was far from a clean slate for both sides as it would be if an outside provider came in to teach.

When asked how they felt about joining me for yoga, out of 23 students that were surveyed, 13 expressed positive statements, six shared neutral or mixed feelings and only three were not happy about it. Some examples of their statements are located in the table below.

Positive Statements	Neutral/Mixed Statements	Negative Statements
Comfortable. I've done it before so... It's kool	I feel confident. TBH I always wanted to do it but I love my 3rd period Wednesday	I don't wanted to be taken out of class
Excited, #backwithMs.Black	I feel bland. I'm not hating or liking it.	I don't want to do it, it never helps. Ms. Evans asked me.
Happy I at least have one class with you since I'm in 8th grade	Just weird caused its my first time	I don't want to do this at all.
Relieved and happy	I feel okay because I don't see why I am in here?	
I feel like it can help me to bring my anger down		

Quotes from the pre-yoga survey administered to students when asked: "How do you feel about doing yoga with me?"

Based on all of the responses, I found that there were many factors that influenced the student's eagerness to participate. This was particularly helpful when creating the foundations of the program. Relationships were indeed a strong motivating factor. As you can see in the first column of this table, having a prior relationship with me allowed students to feel overall more positive about joining me for yoga. I had a large group of eighth grade boys that were excited to have a class with me since I only teach seventh grade. But relationships weren't the only factor that determined their positive feelings about doing yoga with me. Other factors were feeling that it would be a useful tool, previous experience with yoga, and a general sense of comfort or familiarity.

As you can see, not all students responded positively, which in a middle school, I have come to expect. Based on the data from the initial survey, students that had mixed or negative feelings were sometimes frustrated with being pulled from a class that they enjoyed or they didn't understand why they had been asked to join the in-school yoga intervention in the first place. Though I spent time explaining how yoga was a useful tool in my life and that I believe everyone should have access to yoga, I later learned that this was being oversimplified by the Dean that told a couple of students that it was because they have anger issues. As true as that may be in some cases, I can certainly understand that if I were being forced to participate in a program because I was told I had anger issues, I probably wouldn't be thrilled about it either.

As explained previously, this version lasted only a couple of weeks because of a few fatal flaws. First, it became clear that having boys and girls in the same group added a layer of complexity. Neither the boys or girls appeared comfortable moving their bodies in new ways in front of one another. Without falling into stereotypical gender norms, boys and girls often arrived with very different types of energy. When I finally split them by gender in the next version of yoga, I had one group of boys that would start off each class with a high energy push up contest. This was in stark contrast to my groups of girls that would typically set up a mat and immediately lay down. With hormones and adolescent brains just starting to develop, I should have known that separating by gender would have been a good idea from the beginning. But I learned quickly and adapted.

The second major flaw was my lack of ability to control the physical environment when I had to move to other teacher's rooms. In my room, I would have music playing, my essential oil diffuser going, and any props I would need at my fingertips. If time became tight, it was okay if my room didn't look perfect. But when entering another teacher's room, I typically found the corner of the room that would be least disruptive to the other teacher and had to make sure it was immaculate when I left. I always felt guilty about leaving the scent of teenage feet behind when I left.

I also learned that it was important to block out as many curious eyes as possible. We have shades that are technically not supposed to be rolled down, but I began to make this a habit after noting in my journal on February 25th: *"Remember to roll down the blinds. People are always*

very curious about what is going on in my room. Krystal requested that they should be closed.”

While I appreciated the general sense of curiosity and support I received from gawking eyes, it made students uncomfortable. I also realized that if I move our set up to the back of my room, it was harder for people to see in.

Feeling exponentially more prepared and again, leveraging my relationship with Ms. Evans, I was able to make a few additional shifts which led me to my third and final version of yoga intervention.

In-school Yoga Intervention Version 2

It was January 28th and I thought I had started the first of several months of my final version of in-school yoga intervention with students. Ms. Evans graciously helped with the schedule... yet again! We selected the kids we felt needed the most support and had responded well to yoga so far. This left me with 25 students, which ended up slightly increasing after students from after school detention requested to be a part of in-school yoga intervention. Ms. Evans was also able to secure my room for all yoga classes which was a huge relief. My final yoga schedule is below which allowed me to teach five yoga classes per week.

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1		KC -7B OD -7B KM -8C TJ-8B** KS-8A	Indaba	WR-7A SW - 7A ES- 8A TC- 8A JE- 8A KW-8A	
2			TD -6A MZ -6A DS-6B JJ- 6B AH- 6B TB- 6D DJ		
3			MW- 6A IC- 6B CJ- 6C SC- 6B		
L/R					
4					
5					
6				KR -8B BW-8B TR- 8B CW- 8B DD -8B	

This version of in-school yoga lasted only seven weeks before we moved to remote learning. Though I cannot say for certain whether or not I would have found more aspects of the program to tweak, this felt like the sweet spot. I also do not have much in terms of data to show the lasting impact of months of students being exposed to yoga, mindfulness and meditation. What I can talk about are some of the lessons I learned along the way and a couple of students that I can say definitively experienced some positive impact from yoga. The last section of the data analysis will be told through lessons learned and two case studies.

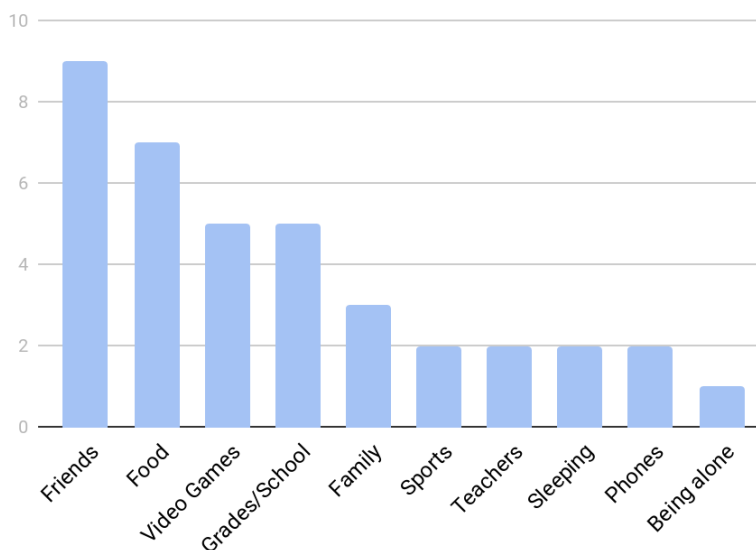
Lesson 1: Leverage Relationships & Allies

Simply stated, I would not have been able to do what I did without the trust from my Director and the hands-on support from Ms. Evans, our Dean of Students. There were so many logistical challenges that I would not have been able to navigate without Ms. Evans, most importantly, the schedule. Though she was already in support of teaching yoga at the beginning of the year, she became more invested on September 25th, after school yoga detention ended. As we were walking a group of eight boys back upstairs, she whispered to me with surprise, “They are noticeably calmer.” And for that specific group of boys, that was a big deal. She quickly became my biggest cheerleader the entire year and helped hold me accountable. I can’t even begin to express my gratitude towards her. Lesson learned, find yourself a Ms. Evans.

Lesson 2: Food = Love

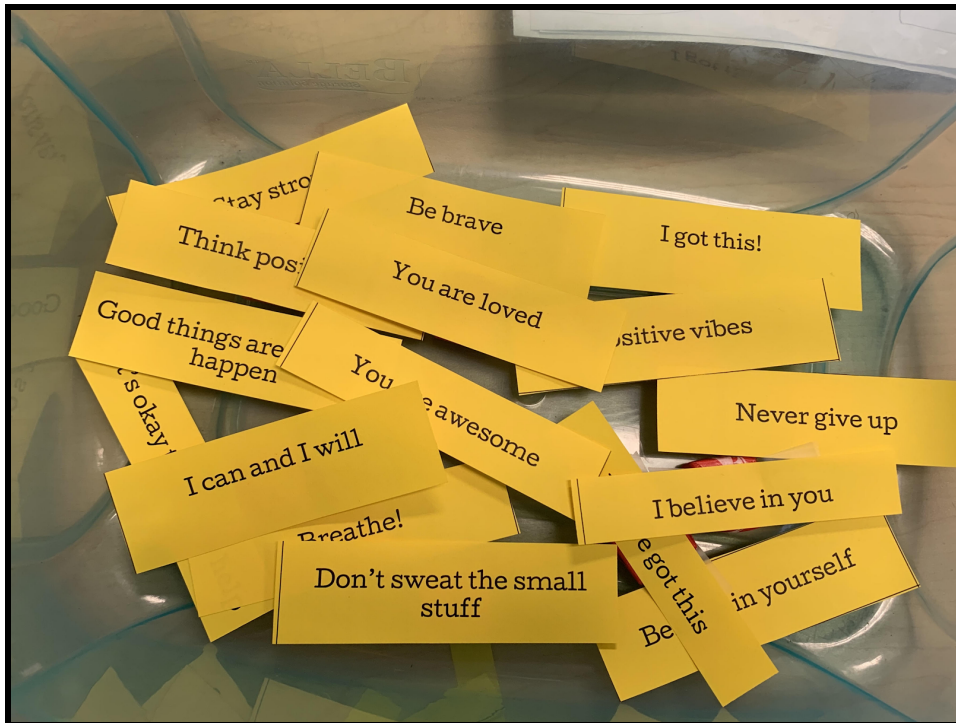
I grew up in a family where we showed our love through food. A homemade cheesecake or berry pie was the center of any celebration. A warm casserole was shared in times of grief, when it seemed like there was nothing else we could do. The details of our busy days poured out over my dad’s famous potato soup at the dinner table. It came as no surprise to me when students identified food as a factor that made them happy in their pre-yoga survey. In fact, it was the second most common response, following closely behind friends.

What Makes Students Happy



Data collected from pre-yoga survey. Students answered the question: “What makes you happy?” and could write in any answer (no prompts).

When I saw these results, I began to think about what I could give students after a yoga class. Passing out a bag of Flamin' Hots would have been expensive considering I was teaching almost 30 students a week and didn't quite feel right. I wanted students to walk out of my room feeling calm and balanced, not running for the drinking fountain with a red dusting covering their hands. I needed something smaller, more sustainable, and a little less spicy. As I was thinking about what students could take with them, I began to think of more than just some sort of food. Seeing as how I was only able to meet with students once a week, I wanted them to have a little reminder of the way they felt during yoga class that they could come back to later on in the week. As I was brainstorming, I remembered one class taught at the Kripalu Institute where the teacher put encouraging words and positive affirmations on post-its and asked us to "take what we needed that day" on our way out of class. I remember holding onto that Post-it for quite some time. Though I don't remember what I chose, it served its purpose as a short term reminder of whatever it was I needed to hear at that time. I wasn't quite sure a post-it would do it for students, but if I taped a Starburst to it, my signature treat in class, I might just reach my desired effect.



This is a picture of the affirmations taped to an individual Starburst that students could choose from at the end of each yoga session.

I began taping short affirmations and positive words to Starbursts and the results delighted me. I watched as students anguished over the decision between what they needed and their favorite color Starburst. To my surprise, students talked more about the phrases or words they chose, making me believe that most of the time, what they needed took priority over the most desired flavor. As students made their selection, I heard phrases like this being uttered: “I’m taking optimism because that’s what I need.” I also watched as Tommy, a sixth grader who frequents the Dean’s office, took the phrase “I got this” and whispered it to himself several times as he was heading for the door. On February 20th after a class with one of my eighth grade boys groups, I noted in my journal:

These boys really enjoy the mantras/sayings at the end of class. Several of them mentioned that they have held onto them. Elijah said he has all of his saved on his dresser. They seem very reflective about what sayings they are going to take. I need to continue doing this.

These mantras also allowed me to have unique conversations with students about their behavior. On March 11th, I noted that Joseph was having a particularly challenging day in yoga. He couldn’t stay in any pose for more than a few seconds and was putting his hands all over other students. When the time came he took the mantra, “strength.” I found the following reflection in my journal:

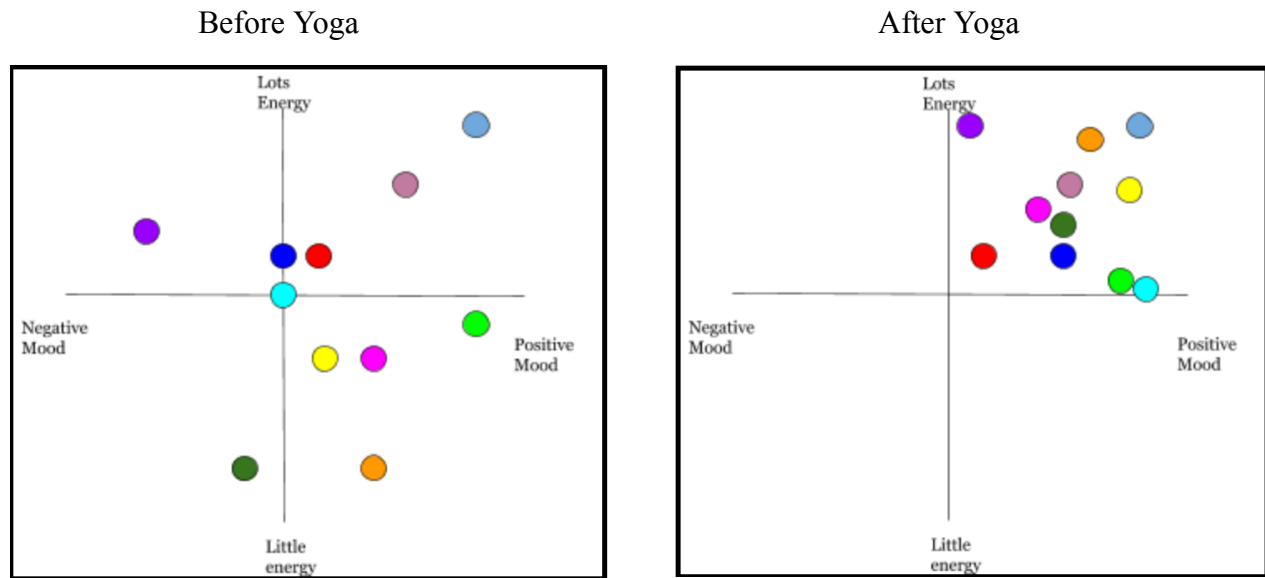
Joseph left my classroom, entered Brainstem and started slapping people in the back on the neck. I talked with him about how I recognized his level of energy today and that he needed to refocus his strength (the mantra he took for today) into mental strength and try some breathing techniques.

What started as a thought to bring in a little snack turned into an integral part of each yoga session. Lesson learned, discover cultural capital and use it.

Lesson 3: Leave your assumptions at the door

As I planned how I would be gathering data, I intended to rely heavily on the mood and energy level chart as a way of tracking how students felt before and after yoga. If students’ mood and energy level increased, whatever I was doing must have been working, right? As I started

tracking their mood and energy level with my after school yoga program, which was something that students elected to be a part of, I got results similar to the ones demonstrated in the graphs below. I became really hopeful, thinking that not only was yoga “working” but this also seemed like a great type of data to rely on.

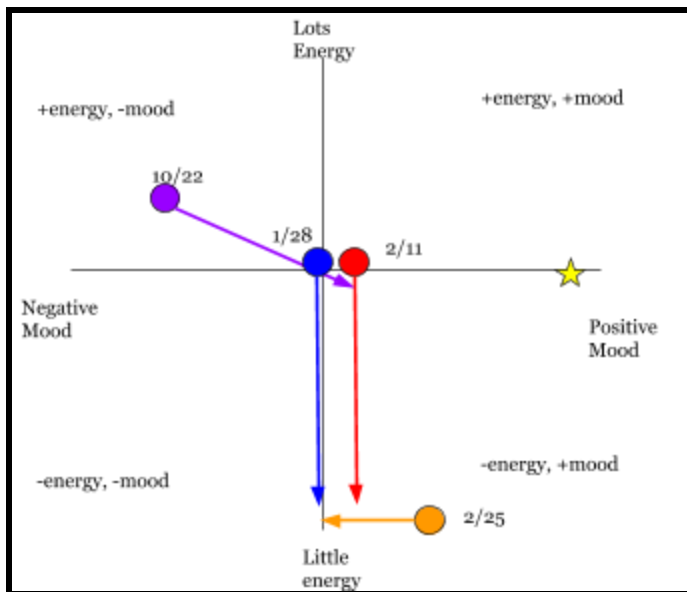


Two graphs depicting students’ self identified mood and energy level from an after school yoga session on October 10th. The left is from before the class started, the right is after.

The difference between the two graphs is significant and naively led me to believe that this would be a great measure of impact. Though I did end up learning something from this data, it was certainly not what I expected. Once I started collecting this same data for my in-school yoga intervention and received far different results, I began to think more critically about the conclusions I had rushed to. I had ignored the context. Students elected to join this yoga class, probably because they enjoyed yoga or knew that it would make them feel better. They also may have realized that the top right quadrant was the most “desirable” place to be. So while there is no doubt that they likely did feel better after yoga, they also likely began the yoga class thinking that they would. Nothing like a little bit of good old confirmation bias to provide this beautiful piece of data.

As I began tracking this data with my in-school interventions, the results seemed to be much more arbitrary. I couldn’t understand why students weren’t getting closer to the “desirable” right

quadrant more often (+energy, +mood). As I was attempting to make sense of this data, I started mapping out the quadrants as you would a mathematical graph as the graph below demonstrates. I was thinking that the goal was to reach the right quadrant, more energy and more positivity. So when I tracked a specific student's mood and energy level before and after class for an extended period of time, I was baffled to find data such as the graph below from Kristina. She seemed to lose energy in every class and barely felt more positive. In fact, one time she identified as feeling more negative. With the mindset that my earlier mood graph was "working", this data made me think yoga "wasn't working."

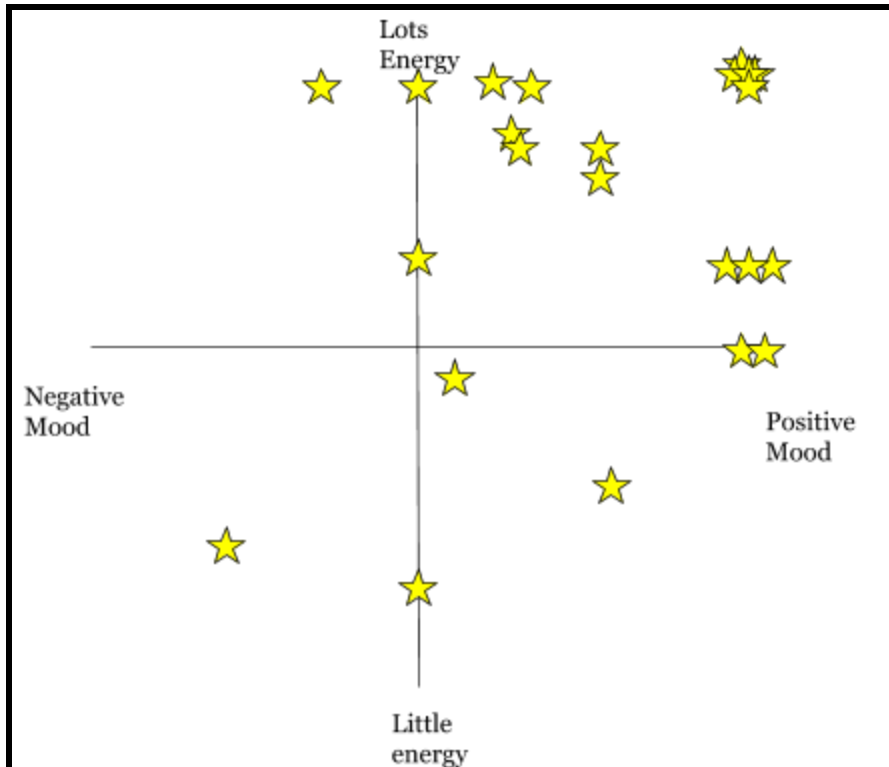


Mood and energy level from four different yoga interventions. The circle represents the starting point before class and the arrow indicates the change after class was completed. Note my initial understanding of what each quadrant represents.

The idea of yoga "not working" based on this data conflicted with more anecdotal data I had collected about Kristina's experience. Kristina was the student that explained that she felt "blank" after yoga. She was also able to describe several times she had tried different breathing techniques before basketball games that helped her mentally prepare. Kristina was usually eager to join yoga each week (with the exception of one week when she was having a conflict with another student in her group) and actively participated. I began to think that maybe this mood and energy tracker was not as useful for tracking data as I had initially expected. It was through this process of trying to make sense of the data though, that I realized I had made a somewhat ignorant assumption about my students. As a person that is typically on the more tired side, well

all the time really, any boost in energy level feels positive to me. But as a classroom teacher, I know too well that many students enter into a classroom with lots of energy, so having less energy might actually be more desirable.

This led me to ask students to indicate on the same graph, where they would ideally like to feel on any given day. In the graph below you can see that while there is a cluster of stars around the highest energy and most positive mood, there are also stars all over the place!



Data collected in mid-February. This graph indicates where students would ideally like to feel on any given day.

Knowing what I know about the ever changing adolescent mood, this shouldn't have been surprising to me. Relying on the adolescent mood for anything is risky, especially to tell if a program is beneficial. They are a swirling mass of dopamine, other hormones and middle school awkwardness all doing exactly what their brains are designed to do. Ask any middle school teacher, a middle schoolers mood can run through every emotion within a single class period. So while this data may not have been informative in the sense that I expected it to be, it certainly made me rethink who my audience was and to think critically about the data I was collecting. As

the age old saying goes about what happens when you assume... Well, you know it; lesson learned.

Krystal 's Story

Krystal is the epitome of adolescence wrapped into one body. She is the type of student I describe as being like a cat. She wants to come to you on her own terms and any forced interactions can result in disastrous effects. She was new to UCW this year and had a rough start. By October 21st, of those 1,809 demerits, 38 were Krystal 's. As a 13 year old, she has already developed an intimate relationship with mental health issues. So of course, Krystal was on the top of my list for in-school yoga. She started off skeptical and irritated. She later explained that she thought she was in trouble the first time I pulled her for yoga.



But Krystal quickly began to love yoga. At the end, when taking her final survey, she identified her favorite part was the calming of my voice. She was also able to describe multiple times when she wanted to punch something, mostly her little brother, but learned to pause, take a letting go breath (her favorite), and often found the desire to punch him had lessened.

My favorite moment with Krystal was on one of the most challenging days I have ever had teaching. I found out there had been essentially an underground cheating ring going on in my classroom. I was devastated. I had to have some of the hardest conversations of my career with students and families. This happened on Krystal's yoga day and she was the only student in her group present. I approached her to see if she still wanted to do yoga, fully expecting her to decline, but to my surprise, she agreed. It was halfway through the class when I realized that Krystal seemed to be reversing. Krystal was offering suggestions for what we should do and even cueing me to breath. When I asked Krystal about this day when the roles reversed and she became the teacher, Krystal said:

I just wanted to try to calm you down because you seemed really angry. So I asked you if you wanted to do it, like practice you breath and do the stretches that I did.

I actually enjoyed it, I was just a lot happier that you felt better after that.

For those of you that know middle schoolers, that level of empathy is rare and is something I will treasure forever. At Krystal 's specific request, I cannot wait to continue teaching her yoga next year.

Brandon's Story

Teaching in the school where I started the yoga program was a double edged sword. There were times when it was helpful, for instance when we needed to select students that would benefit from yoga or to get a general sense of buy in from students that trusted me in the past. There were also times when my previous relationships got in the way. This was the case with Brandon. Remember when I asked students how they felt about doing yoga with me? Brandon was the student that stated: "I don't want to do it, it never helps. Ms. Evans asked me." I was not at all surprised to see that comment. Brandon was my student the previous year and we had a very complicated relationship, something like oil and water, a rare occurrence for me. When his name came up for after school detention and was then brought up again as a student that would be a good candidate for in-school yoga, I pushed back slightly saying that I wasn't sure how he would respond to yoga. What I really meant was that I wasn't sure how he would respond to me. I was more than hesitant about including him in the program. We made the final list and when I found myself sitting on my couch that night thinking about how this would go with him, I decided that it just wasn't worth it. I emailed Ms. Evans and said that I was taking him off the list, admitting some of it was our relationship but that I didn't see it going well with him there. Had it not been for a gentle nudge from her, the negative relationship we had developed over the previous year would have taken this opportunity away from Brandon before he even had the chance to experience it. Ms. Evans reminded me that it could be an opportunity to repair what was broken between us. Brandon and I both ended up making a tentative deal with Ms. Evans, that if it wasn't going well, it didn't have to continue, but we both agreed to try.

Brandon's experience with yoga was defined by small but mighty victories. What may have been considered minimal or no progress for other students, was often a huge step for Brandon.

Brandon struggled with extreme anger, something he was acutely aware of. When taking the

yoga pre survey and asked about how often they feel anger, Brandon was the student that wrote in “always” next to the other options and circled it. The day after our first first after yoga school detention, I found Brandon with bleeding knuckles, saying he had punched the wall. I told him he could get a bandaid from my room if he stopped by. I was actually surprised when Brandon walked into my room, a short while later. I helped patch up his hand and asked if he 100% hated yoga from the day before. Brandon pondered the question for a moment and said, “95%” I tried to hide my smile because for Brandon, that was a huge win.

Brandon was notorious for dramatically rating his mood and energy level as low as he possibly could at the beginning of class. He would actually spend a significant amount of time forcing the magnet to get as close to both corners of the frame as possible. While most days after yoga, Brandon again made it clear he didn’t want to move his magnet any, there were a couple of times where he moved his magnet just a millimeter or two towards the more positive mood. Again, I know it doesn’t seem like a lot of progress, but for Brandon, a student who self identifies as always feeling angry, it was a big deal. Brandon also showed up, every week except for one. Remember, he had an agreement with Ms. Evans that if at any point he didn’t want to continue yoga, he didn’t have to. He was often the only student that would stop by to help me set up the room. So even though his mood and his energy level might have remained concerningly low, even after yoga, the fact that he showed up every week spoke loud and clear.

But my biggest win with Brandon was the progression of his response when asked about doing yoga with me. What started off as “I don't want to do it, it never helps. Ms. Evans asked me” did a complete 180 degree change. He was one of the few students to complete the end of year survey virtually. When I asked Brandon what he liked about doing yoga with me after, he responded by saying “everything.” Now that is something I can imagine we can all agree on as being a major win. It also leaves me wondering how different Brandon’s life could have been and still can be if he was exposed to this at a much younger age. This leads me directly into my policy recommendations.

Policy Recommendations

As you can see from Krystal and Brandon’s story, yoga makes students feel good, and there are a lot of things we can do to make this more accessible to young people, starting with what I can

do as a teacher. I want to continue to move away from the punitive behavioral system that my school follows and replace them with positive behavioral systems within my classroom. I want to incorporate quick meditations and breathing techniques into my Social Studies class and will continue to seek out more trainings on trauma responsive yoga. I also want to provide yoga classes for teachers who need it just as much as the students!

For my school, I think we need to minimize our reliance on the ladder of consequences. One way to do this is to have teachers review their own demerit and referral write ups. Doing that as a part of my ARLI research from the previous year caused a significant decrease in the number of demerits and referrals that I wrote. They suddenly felt petty, for lack of a better word, when taken out of context and the frustrations from any given day. I think yoga should become an integral part of our school which includes training other teachers so it can be reinforced frequently.

As a nation, we need to continue to support the increased focus on Social Emotional Learning. This is not something that should be taught for a quick lesson in isolation, but something that should be modeled and reinforced throughout their whole school day. This means that teachers need to be trained in this field and should be held accountable for continually growing in this area. There is a great opportunity for schools to move away from punitive behavioral systems as a whole and to incorporate restorative practices instead. Lastly, and I believe most importantly, we should begin teaching students yoga, mindfulness and meditation at a much younger age. We do not have the power to change the unique set of circumstances, challenges and trauma that students may experience outside of the walls of our school. But we can equip them with the skills, resilience and confidence to get through anything life throws their way.

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