Michael Delligatti Reflection TABSA 2024

In my first year as a science member of the Teachers Across Borders Southern Africa team, I have come to understand that it transcends being a group of teachers; it evolves into a closely-knit team where individuals bond and support each other like family. In both my teaching career and personal life, this month-long journey remains the most deeply enriching experience I have encountered. The team affectionately refers to one another as our "TABSA family," a title that perfectly encapsulates the strong sense of belonging we all share. This feeling of unity fosters remarkable collaboration both within our United States team and during our workshops with our colleagues from South Africa.

The core mission of TABSA is: we join hands to share our professional knowledge and skills with our South African counterparts as they strive to revitalize their education system, particularly in the fields of science, technology, engineering, and math (STEM). Despite the challenges stemming from 40 years of apartheid that deprived learners and educators of these disciplines, we stand together to support our colleagues in the areas they need most. The groundwork for our mission commences months before our arrival in South Africa, as we collaborate to design interactive learning experiences for these teachers, mindful of the limited teaching resources available in South Africa.This preparation ensures that we equip these educators with the tools they need to enrich, enhance, and inspire their students' educational ability.

Within my first week of TABSA 2024, it brought together grade 11 girls in the science discipline, who were divided into groups of no more than 30 per classroom. This arrangement allowed for each group to be led by one of three facilitating science teachers throughout the entire day. Working with these science learners has been a cherished experience for me. Our time together was filled with engaging hands-on activities, where we facilitated an interactive class setting, with practical experiments. Witnessing the sparkle in the students' eyes as they connected their classroom theory into real-life applications, especially when experimenting with circuits. It was truly memorable. The opportunity to see them apply their knowledge using lab materials was a unique time for them, which was an incredibly rewarding experience. We covered a wide range of science concepts within the students' curriculum such as series and parallel circuits, which we explored using aluminum foil, 3-volt cells, and Christmas lights. We also reviewed Newton's laws of motion through

hands-on interactive learning labs using everyday items such as balloons, coins, and string. Our science team members also helped facilitate various chemistry topics using basic over-the-counter materials found in local markets. This first week of workshops allowed us to share with these learners a way to engage in hands-on lab experiences, fostering a deep understanding of scientific principles in their studies. By engaging in practical science with minimal resources, we not only deepened the students' understanding of scientific concepts but also ignited an intrinsic motivation to pursue further studies in the STEM field. This hands-on approach not only enhanced their learning but also instilled a passion for science that transcends traditional classroom boundaries.

Throughout the workshops, we extensively utilized the resources from our "lab"; a collection of recyclable and reusable materials, compiled over two decades by past TABSA volunteers. Bob Brennan, our laboratory resource leader, played a crucial role in efficiently organizing and managing these materials. Our science team often relied on Bob to prepare the necessary course materials for our upcoming lessons, ensuring seamless and effective sessions. After each class, our team promptly cleared the classroom setup and arranged materials for the following day. In the evenings, our TABSA family assembled to plan for the upcoming days, tailoring our approach to align with the specific needs of our colleagues and the CAPS curriculum.

The next two weeks of TABSA for me involved working with teachers in predominantly grade 7 natural sciences, and occasionally grade 8/9 science teachers, where we designed activities suitable for class sizes exceeding 50 students, often in rooms lacking basic science supplies. This challenging setting really pushed me to prepare lessons that could be easily facilitated and utilize common items that can be used in a flexible manner. The sessions were characterized by collaborative discussions aimed at enhancing teaching practices to better serve students' needs. Teachers were grouped in teams of 5-6 members per table and were frequently asked to collaborate in pairs and whole group discussion. Subject advisors also took part in these science practicals and were just as eager to conduct the lessons alongside their peers. Witnessing the teachers' enthusiasm and newfound confidence in their subjects was truly rewarding. The workshops not only enriched our pedagogical skills but also reignited all of our passions for teaching. Participating in lab activities centered around challenging science topics from the CAPS curriculum, such as heat transfer, astronomy, and energy, was a highlight of the workshops. Observing teachers immerse themselves in these hands-on labs was a joyous experience that I valued being a part of. Being able

to take the lesson outside and make learning science a fun experience was most rewarding. Adding simple techniques to learning science to help promote ways to help motivate learners such as melting chocolate in a unique design solar oven helped expand upon teachers skill sets. Witnessing their eagerness to engage with the practical aspects of science, take the lead in the experiments, and brainstorm innovative ways to integrate these lessons into their classrooms was incredibly gratifying. Allotting precious time in each session for teachers to interact, exchange insights, and share their classroom experiences significantly enhanced the workshop's impact. Building connections with each teacher and gaining insight into their daily classroom struggles was an emotional journey. However, seeing their unwavering passion and determination to implement new strategies and apply the knowledge acquired during these weeks was undeniably one of the most fulfilling aspects of my teaching career.

Our collective belief in the transformative power of education unites us in a shared mission towards building a more equitable society. Despite the logistical challenges faced by our South African colleagues, including large class sizes and limited resources, their unwavering dedication to their students and teaching pedagogy is truly inspiring. The workshops not only made science and math more accessible but also reaffirmed the vital role of education in shaping a better future. As we concluded the final workshop session, the room filled with music, food, and dancing as our South African colleagues expressed their gratitude through joyful celebration. This experience underscored the collaborative and nurturing nature of teaching, reaffirming our shared commitment to fostering a supportive and inclusive learning environment.

Returning to the United States after my time with my TABSA family and South African colleagues has left me with a sense of melancholy, for this experience has been one of the most impactful journeys in my life. The opportunity to collaborate, learn, and be inspired by dedicated educators has left an everlasting impact on me. The connections forged and the transformative moments shared in the science classroom will forever hold a special place in my heart. I am humbled by the impact we have had on each other's lives and teaching practices, knowing that the knowledge and passion we cultivated together will continue to flourish in classrooms both near and far. As I prepare to resume my teaching journey at ‘Iolani School, I carry with me the lessons learned and the magic experienced during my time with TABSA, eager to infuse my teaching practice with renewed energy and purpose. This experience has been a gift, and I am deeply grateful for the opportunity to be part of such a remarkable and enriching journey.