



DISCOVERY MIDDLE SCHOOL: Fighting for a patch of grass

The green space rests tauntingly behind a tall barbed-wire fence outside of Discovery Middle School in the Gulfton area of Houston, TX. For the 319 middle school students whose classrooms are housed in an office complex next to the Westpark Tollway, they resort to kicking their soccer balls in a coned-off section of the parking lot or in the narrow alleyway between buildings. The well-maintained grassy tract of land belongs to the City of Houston, reserved for but not yet used by a local utility. Months of advocacy efforts by Discovery Middle School's principal, Debbie Silber, for even temporary use of the land by her students have yielded no results and even less information. Her next step is to speak before Houston's city council, but that effort is just one item on a long to-do list for this tenacious administrator in a severely underserved community.

A marked absence of green space is just one of multiple barriers faced by the students at Discovery. Maria Benzon, the school's vice principal, estimates that close to 95% of students are native Spanish speakers, many of whom



come from low-income families newly arrived in the United States. The charter school offers more than an education. It is a small community of support for families still navigating their way in a new country while providing exposure to future opportunities and possibilities ahead. To this end, every Friday is College and Career Day at the school, and the students are encouraged to dress up in professional attire as if on their way to a new job. Benzon reports that on these days, she notices a difference in the way students carry themselves, as well as a reduction in disciplinary action. "They get lots of compliments...We want them to feel good about themselves," she says.

In November, CELf educators, Lisa Gianukos and Amanda Brown, became a small part of this support system by participating in the school's Discovery Week dedicated to environmental literacy.

Discovery classes are weekly themed periods with a focus on social and emotional learning while providing extra support for the students in reading and writing. The twelve classes are separated by gender and students read news articles on a theme of interest to them, and then discuss the issues in class. Past weeks have been





dedicated to immigration issues, bullying and human trafficking. The weeks culminate in an interdisciplinary experience related to the theme. CELF's participation was the first time outside experts were invited into the experience, an innovation Benzon intends to repeat.

As such, CELF designed a series of mini-workshops for students in collaboration with six partner organizations dedicated to environmental education and awareness in the Houston area. Speakers from the Mayor's Office of Education, the Audubon Society of Texas, the Kickerillo-Mischer Nature Preserve, the Citizens' Environmental Coalition, the Student Conservation Association, 350.org and the US Fish and Wildlife Service presented to the students about their work and ways the students can connect to their local environment and sense of place.



From Benzon's perspective, exposing the students to a range of possible careers added an extra dimension to the experience. In a small school with limited capacity, Benzon appreciated the support CELF



educators provided in connecting the school to community partners. She hopes to expand that initiative and will bring CELF back for another Discovery week in April.



Beyond their work with Discovery classes, Lisa and Amanda will be collaborating with the 6th and 7th grade science teacher to implement an afterschool air quality monitoring project. With the school located next to a freeway in a dense neighborhood with few parks, respiratory ailments are an issue for students and faculty alike. The air quality project will put monitoring tools in the hands of students connected to a data-sharing platform. Students will learn to visualize and share their data, identify hotspots in their community, and generate possible solutions for a pollution prevention plan. The culminating exercise for the project will be participation in a student symposium with other schools from around the city sharing their pollution prevention plans with local community members and policy makers. "The civic engagement piece of CELF's air quality project is the most important one in my opinion," says Lisa Gianukos, CELF's Houston Program Director. We want to help Discovery students learn to advocate for themselves and solve problems for themselves and their community."

Principal Silber appreciates the project's focus on "problem-based learning." Lisa Gianukos observes, "This school is unbelievably resilient. They keep regrouping and finding new solutions when faced with challenges."



They may not have a patch of grass to play on, but the school has a gardening elective for students where they use large portable planters indoors. One day, they dream of a community garden.

Prior to becoming principal at Discovery Middle School, Silber spent seven years as principal of Berry Elementary, an environmental science magnet school in north central Houston. There, kids grew their own fruits and vegetables and learned to cook and eat from their garden. They collected rain water in cisterns, composted their food waste, and took field trips to explore the environmental assets around their campus. She says that the advantages that program brought to the students were not just related to environmental health and awareness, but it was the sense of purpose the program offered. She saw its impact in the kinds of connections students would make in their reading, in their ability to integrate all subjects. From her perspective, the environmental science focus helped the whole child and helped the community. She has ambitions to find a similar sense of purpose to unite the students of Discovery Middle School, to develop leadership skills, critical thinking and problem solving, and develop the kind of social and emotional learning they are cultivating in their Discovery classes. “My dream is that the kids are one day able to say ‘This is who we are at Discovery and this is why we are here.’ Without a purpose, kids are just coming to school.”

Could environmental literacy be the organizing principle around which students at Discovery Middle School find purpose? Silber is still exploring: “Parents here don’t have time to worry about the environment. They are worrying about how to put food on their table. When people don’t have their basic needs met, it’s hard to think about anything else.”

Yet Silber muses, that doesn’t mean it shouldn’t be part of the curriculum for these students. In fact, it’s all the



more important that these students are aware of how they impact the environment around them and how the environment impacts them, how it affects how and what food gets put on their table.

As Lisa Gianukos points out, “Social equity is one of the main pillars of our [Big Ideas of Sustainability](#). When we are exploring the health of our environment and a sustainable future, we can’t forget that very important element.”

Educators like Silber and Benzon and their dedicated faculty are working hard to address social equity issues in the Gulfton area of Houston, Texas by providing equal access to opportunity for Discovery students as best they can with limited resources.

For now, Silber has her sight set on the patch of fenced off green space across the parking lot. “I am going to set that up as a problem-based learning unit next semester. The kids are going to figure it out. That and the recycling...They are going to figure out why our school does not have recycling, why it’s important, and how we can get it. That’s what is going to happen next semester.”

Stay tuned!