

CASE STUDY

Boulder Valley School District: A Role Model in Action Planning for Whole School Sustainability

DISTRICT PROFILE

Location | Boulder, Colorado
Number of schools | 56 schools
Number of students | 31,000 students
Percentage Receiving Free & Reduced Price Meals

In 2008, Boulder Valley School District (BVSD) hired Ghita Carroll to serve as its Sustainability Coordinator. One of Ghita's first tasks was to create a sustainability plan. First drafted in 2009, and updated in 2015, BVSD's Sustainability Management System (SMS) has served as a comprehensive road map for the district's sustainability efforts.

THE PROBLEM

Since 2009, BVSD has implemented facilities and operations-related programs that have had a tremendous impact on sustainability. However, BVSD was struggling to incorporate education for sustainability into the district's teaching and learning program. This challenge was top-of-mind when Ghita first spoke with Green Schools National Network's (GSNN) Jennifer Seydel in September 2019 to seek help in creating a new action plan driven by whole school sustainability. Working with GSNN would enable BVSD to bring an educator's mindset to the planning process, which had been led by engineers up to this point.

OUR IMPACT

The action planning process kicked off in fall 2020 and was a true collaborative effort, with involvement from district staff, teachers, parents, and community partners. A first step was developing a progress report that detailed the current status of BVSD's sustainability work, where gaps existed, and recommendations for focus areas in the new action plan. The report was presented at BVSD's March 2021 sustainability leadership summit and was the subject of four focus groups GSNN conducted in March and April 2021, one for each area of the report (buildings, materials, transportation, and education), to consider and build on existing recommendations.

Working with GSNN, BVSD created a five-year sustainability action plan that goes beyond an operations focus to integrate best practices across the entire school system related to health, equity, and sustainability – in leadership, curriculum and instruction, culture and climate, and facilities and operations.



RESULTS

BVSD's sustainability action plan received approval from district leadership in June 2021 and the board of education in September 2021. The plan includes a new vision and mission that align with BVSD's strategic plan and each of its four focus areas includes three to four supporting goals that put in place new systems and structures, such as a professional learning plan to support deeper learning and practice related to sustainability and an approach to identifying how and where education for sustainability can be integrated into the curriculum. Each focus area also includes indicators and measures that will be used to collect data to assess progress and make decisions. BVSD's sustainability action plan has already spurred some early successes. These include:

- Formation of a Sustainability Advisory Group.
- Creation of a sustainability dashboard, set to launch in spring 2022. The dashboard will help each school collect and track data related to healthy, equitable, and sustainable best practices. Each school has a "green report card" that allows them to see their energy, water, and waste data, and how they compare to other BVSD schools.
- Incorporation of green building design principles into BVSD's technical specifications, which will be used to assess facilities for future needs and integrated into guidance documents for building design.
- A curriculum pilot of a new K-5 biomimicry unit, with support from GSNN and the Biomimicry Institute.
- An assessment of learning spaces to determine what is needed to meet the goal of creating green schoolyards and outdoor learning spaces at all elementary schools and increasing outdoor learning spaces at all secondary schools by adding seating and shading.



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CASE STUDY

Virginia Beach City Public Schools : A Role Model for Sustainability Leadership

DISTRICT PROFILE

Location | Virginia Beach, Virginia

Number of schools | 86 schools

Number of students | 67,000 students

Percentage Receiving Free & Reduced Price Meals

In 2014, Virginia Beach, Virginia was ranked as the third most conservative city in the country. Not the place you would expect to find a school district that is a national leader in sustainability. Yet, this hasn't stopped Virginia Beach City Public Schools (VBCPS) from spending the past two decades building an impressive track record in implementing practices that reduce its ecological footprint and operating costs.

THE PROBLEM

Despite early success, VBCPS still had departmental, school, and division leaders who didn't view their daily practices through a sustainability lens. Getting everyone on board would require a divisionwide culture change. In 2014, Tim Cole was approached by Jennifer Seydel of Green Schools National Network (GSNN) to host the 2015 Green Schools Conference at Virginia Beach. This initial engagement led to an opportunity to work with GSNN and develop a model for whole school sustainability that could be replicated at school districts across the country.

OUR IMPACT

In July 2016, 50 VBCPS senior leaders gathered for a sustainability leadership summit where they worked with GSNN and other green school experts to identify what VBCPS needed to do to create a culture that values sustainability and supports sustainable practices at every level – from buildings and operations to classroom curriculum. GSNN staff conducted several active listening sessions before and during the summit where they helped participants begin to refocus their priorities using a sustainability lens. They also listened in on small group brainstorming sessions and served as a sounding board for ideas that were generated, helping participants narrow in on a few key areas that fit the division's sustainability vision. Over 40 ideas were generated by the end of the summit and three were selected as division priorities: building assets, transportation, and food.



RESULTS

Since 2016, VBCPS has made significant progress in the three areas identified at the summit.

Managing Building Assets

VBCPS finished construction on its thirteenth LEED building in September 2021, putting the division at just over two million square feet of LEED building space. Despite increasing their square footage by 9%, VBCPS decreased its energy consumption by close to 27%.

Lowering Transportation Emissions

VBCPS set two ambitious transportation goals: reduce fuel consumption by 50% for their vehicle fleet by 2030 and reduce transportation emissions by 50% by 2050. To meet these goals, VBCPS is shifting to newer, lower emissions vehicles and vehicles that operate on propane and electricity. They have acquired eight propane buses and eight electric buses and completed a long-range study that explores electric vehicle charging infrastructure for their entire fleet.

According to the division's 2019 Greenhouse Gas Inventory and Emissions Reduction Plan, VBCPS reduced its overall emissions by about 47,520 metric tons of CO₂ between 2006 – 2016. In addition, gas consumption in their white fleet decreased 39% and diesel consumption within their yellow fleet decreased 4%.

Adopting a Sustainable Food System

VBCPS has made a commitment to implement a divisionwide scratch-cooking program. A yearlong pilot program was conducted at Old Donation School in 2017 that included training food-service workers in scratch-cooking skills and techniques. In 2018, VBCPS hired a division chef, built a team dedicated to scratch cooking, and created a "from scratch" menu that is being scaled across the division. VBCPS also has a plan to retrofit all 86 school kitchens for scratch cooking by 2024. These efforts are in addition to VBCPS' existing farm-to-school program and their goal to increase local procurement by 30% over 2009 levels.



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CASE STUDY

Zuni Public Schools: A Role Model for Fostering a Culturally Relevant School Culture

DISTRICT PROFILE

Location | Zuni Public Schools

Number of schools | 4 schools

Number of students | 900 students

Percentage Receiving Free and Reduced Price Meals

Located in western New Mexico, Zuni Pueblo has a rich history that extends over thousands of years. The Zuni people are committed to keeping their culture and traditions alive for future generations. One way they are sharing this knowledge is through their schools. About thirty years ago, Zuni Public Schools (ZPS) became an independent school district. This change allowed ZPS to do more to connect students to the Zuni language and culture.

THE PROBLEM

By 2018, ZPS had hired grade-level language and culture teachers, added cultural heritage days to the school calendar, and started incorporating Zuni core values (known as A:Shiwi core values) into the district's culture. However, the superintendent wasn't satisfied. He wanted to further integrate A:Shiwi core values into the curriculum, including a focus on building social-emotional learning (SEL) competencies. Around this time, the superintendent learned about David DenHartog's school transformation work. He invited David (then working independently and now serving as GSNN's Lead District and School Strategy Consultant) to help ZPS kick off an initiative that would integrate the A:Shiwi core values in teaching and learning.

OUR IMPACT

Since 2018, David and GSNN have been working with ZPS to integrate A:Shiwi core values into daily teaching practices using the 4PBL (phenomena-, place-, project-, and problem-based learning) model and make connections between these values and SEL competencies drawn from the CASEL (Collaborative for Academic, Social, and Emotional Learning) framework. A key step was helping ZPS teachers better understand the A:Shiwi core values and think strategically about how to build skills and knowledge around SEL competencies to support integration of those values.

To facilitate this, David assembled a team of teachers, counselors, and instructional coaches to lead the work and act as advocates and mentors on behalf of their colleagues. David meets with this team regularly, in-person and virtually, to check-in, review progress, and consider next steps. In addition, David and GSNN support ZPS by:

- Identifying resources to guide 4PBL and SEL lesson planning.
- Holding workshops on topics like what 4PBL is and how it connects to content and standards, what a good project looks like, and how to model SEL lessons for teachers.
- Collecting data that measures how well teachers are integrating SEL and 4PBL in their classrooms.



RESULTS

With GSNN's help, ZPS is creating resources, structures, and systems that support the teaching of SEL and 4PBL. SEL

The ZPS team has created a SEL lesson design framework that informs lesson development across grade levels. This framework ensures lessons share a similar structure, which creates consistency, allows for flexibility, and promotes quality. ZPS is also dedicating time during the school day for intentional instruction and development of SEL competencies and connections to A:Shiwi core values. This work started in the middle school and was introduced in the high schools (TBird time at Zuni High School and Panther period at Twin Buttes Cyber Academy) during the 2021 – 2022 school year.

To inspire confidence and participation, ZPS is providing professional learning opportunities, pairing struggling teachers with peer mentors, and using videos that demonstrate how to teach SEL. For example, ZPS established an after-school TBird time for teachers to facilitate skill building in areas such as mindfulness activities, emotional regulation skills, and using different modalities while teaching SEL. 4PBL

Prior to working with GSNN, much of the teaching and learning at ZPS had little to no connection to the local community. Now, teachers are using the 4PBL model to work across disciplines to create curriculum that's connected to A:Shiwi core values, is place-based, and incorporates SEL competencies. Lessons also include more opportunities for students to connect with their community and the surrounding environment, highlighting the importance of their culture and sense of place. Student portfolios and senior exhibits often feature elements of problem- or place-based learning and focus on topics that students are excited about, such as learning about ancestral farming methods and foodways and adobe construction practices.



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