

The Vancouver School Board

Environmental Sustainability Plan

Our Vision: To be the greenest, most sustainable school district



Approved by Board of Trustees
May 28, 2018

Acknowledgements

This document was created by Board direction under the guidance of a Sustainability Advisory Committee. Committee members included representatives from VESTA, VSTA, VEPVPA, VASSA, IOUE, DPAC, VDSC, and several internal staff. The efforts of these participants to contribute freely to the development of the plan is gratefully acknowledged.

The VSB acknowledges with gratitude that our schools and learning centres are located on the unceded and traditional territories of the Coast Salish peoples – s̓k̓w̓x̓w̓ú7mesh (Squamish), sel̓ílwitulh (Tseil-Waututh), and x̓w̓m̓əθk̓w̓əy̓əm (Musqueam) nations.

Context

The Vancouver School District

The Vancouver School District is a large, urban and multicultural school district. With several thousand educators and staff, it serves 50,000 students from Kindergarten to Grade 12 at more than 100 educational facilities and offers numerous district and specialty programs. The District's mission is to serve the needs of each of our students so that they may achieve their unique potential.

The VSB 2021 Strategic Plan defines a vision to “inspire student success by providing an innovative, caring, and responsive learning environment” through the advancement of four goals:

- Goal 1: Engage our learners through innovative teaching and learning practices.
- Goal 2: Build capacity in our community through strengthening collective leadership.
- Goal 3: Create a culture of care and shared social responsibility.
- Goal 4: Provide effective leadership, governance and stewardship.

Sustainability Initiatives at the VSB

Sustainability-related activities have been underway within the District for many years. Individual champions, small networks, and school-based groups have come together to implement numerous “green” activities. These include waste reduction, composting, recycling; gardening, healthy eating, energy conservation; active transportation; and numerous other student- and teacher-led activities.

While there are many examples of individual actions, pilot projects, and small-scale activities, there are fewer examples of networked or coordinated approaches to sustainability. The educator groups are leaders in building networks through their executive sub-committees (e.g. environment or social justice), the BCTF, or the many professional specialist associations.

Sustainability Framework

In 2010 the VSB Board of Trustees approved a Sustainability Framework that set a vision to be “**the greenest, most sustainable school district in North America**”. The framework identified a number of key opportunity areas for action. It defined aspirational goals for the District – setting the stage for the development of this action plan.

Scope and Theme Areas

The District acknowledges that sustainability requires a consideration of many components of society – the economy, social and governance structures - beyond just the environmental impacts of our actions. As a starting point for the District, this plan

looks through an environmental lens and is primarily an 'environmental plan'. Despite that, each of the actions draws upon the other components of a sustainable society.

The actions are structured within five theme areas.

- Sustainability in Education
- Green Spaces
- Resource Conservation and Climate Change
- Sustainable Transportation
- Leadership in Sustainability

Defining a “Sustainable School District”

There is no common definition of what it means to be a 'sustainable school district'. There are rating systems for components of this – such as 'green buildings', 'green schools', etc. These focus primarily on the construction and operations of facilities but many do not address the core activity of K-12 education – limit the focus to 'education as a path to the operational outcomes' (e.g. resource reduction). The broader issues of the natural world, and humankind's place in that world is not always captured in these evaluation systems.

In 2013, the District conducted a 'sustainability audit' to help assess our progress and provide better clarity for our vision. A *working definition* of a “green school district” was proposed as one in which:

“...the VSB will address all its activities that directly and indirectly impact the environment. Our most significant opportunity is developing conscientious citizens.”

The audit identified a need for a strong focus on the educational aspects of sustainability – connecting students to the natural world, empowering personal action, and supporting critical thinking in all our learners.

It's more than the crises

Environmental sustainability frequently draws immediate attention to environmental problems – waste and garbage, water conservation, traffic congestion, or climate change. Exposure to environmental issues may spur some people to action, however, evolving research indicates that presenting environmental 'disasters' to children at an improper age does not foster action – rather it can dissuade engagement with nature. The term has been coined as 'ecophobia'.

“If we want children to flourish we need to give them time to connect with nature and love the Earth before we ask them to save it!

David Sobel “Beyond Ecophobia”

The inter-connectedness of the biosphere (and our place within it), and the simple opportunity to spend time in, and surrounded by nature is a wider scope for educational opportunities than environmental problems. This approach also serves our learners by

allowing them to experience, discover, and reflect upon their identities, their place, and their understandings.

A “sustainable school district” must provide exposure to the natural world for its own value – not just where there is ‘impending doom’. This appreciation is a foundation from which will flow empathy and understanding. At higher grade levels this understanding can be a catalyst for deeper engagement, awareness, and action.

What do we each think “sustainability” means?



There is no universal definition of a ‘green school district’. As well – every individual has their own thoughts about what is important to them about sustainability and the natural world. This ‘wordle’ was created from an input session during the plan’s development.

Action Areas

Theme: Sustainability in Education

A foundation of sustainability in education is an appreciation for nature and ecosystems especially through experiential learning. This can support critical thinking, promote activity and physical literacy, and make connections to Indigenous traditions, culture and knowledge. Educators are capturing elements of the natural world, ecology, or the environment in their current teaching throughout the District. This theme builds on these efforts and works to support networks of educators via their associations and through the District's networks.



Sustainability is expressed in Indigenous approaches to learning and knowledge sharing (for example see “*Indigenous Principles of Learning*” at www.fnesc.ca or “*Indigenous Ways of Knowing and Being*” at www.bctf.ca). These principles emphasize that knowledge is shared through reciprocal relationships – that as we learn from others we share with them of ourselves. Education can help children come to understand their place in the natural world and also to appreciate a diversity of cultures and perspectives towards the planet.

Goal: Foster a connection to the natural world

Action 1: Support nature-focused learning

Nature- and outdoor-focused learning activities provide opportunities for students to connect with local nature and geography, Indigenous culture and knowledge, and healthy lifestyles.

Example activities could include:

- developing and supporting school-level projects for nature connected learning
- networking through the various educator committees and District channels
- connecting to local Indigenous nations to learn and share stories, knowledge, and perspectives on nature and stewardship

Goal: Support Learning Initiatives that Develop Environmentally Conscientious Citizens

Action 2: Develop professional development and other resource materials

There are many opportunities to develop resources for schools and educators. As well existing programs can be supported as offered by external educators and providers.

Example activities could include:

- promoting Pro-D opportunities for educators. There are a number of Pro-D events available through existing groups (BCTF, EEPsA, and the VESTA and VSTA pro-D committees), and emerging ones provided through the non-profit sector
- leveraging of pro-D materials from the partner organizations such as non-profit organizations, UBC, the City of Vancouver, the utilities.

Action 3: Support networks and relationships between educators

Learning and sharing between educators has been identified as a key opportunity.

Example activities could include:

- strengthening mechanisms for networking and connecting teachers. This includes the educator stakeholder's sub-committees, the Provincial Specialists Associations, District events and communications, social media channels, or other mechanisms
- developing tools on the VSB website (or other locations) to make connections and sharing easier – potentially with some search feature. The current 'Greenboard' on the VSB website could be updated to make it a more useful sharing tool

Action 4: Make our facility activities learning opportunities

Demonstration projects as part of the operations of school facilities can have an educational value. The challenge of implementing operational or demonstrative pilot programs is to make them accessible to the educators and identify the connections to the curriculum. The opportunity is that these examples are visible and local to students and staff. Example activities could include:

- creating educational modules where innovative technologies or practices are included with new school development (e.g. energy conserving features)
- identify links between the curriculum and the other sustainability action plan themes. (e.g. linking a water cycle science unit to a conservation project at a school site)

Action 5: Support student networks for dialogue and sharing

There is an active secondary student council spanning the district – the Vancouver District Student Council (VDSC). Other student groups organize formally and informally including the Vancouver Youth Sustainability Network (VYSN), and student groups that organize sustainability and leadership conferences. Interest and support for these groups

varies depending on the level of activity year to year. Opportunities to increase the impact of these efforts include:

- sharing stories of student efforts and achievements more broadly through the District's communication and social media platforms
- providing seed-funding and mentorship connections for those working to take action
- promoting stronger connections between schools to strengthen VDSC and VYSN activities
- improving teacher networks between schools to better support students

Theme: VSB Green Spaces

The District has extensive grounds at most sites and these can be leveraged for greater educational value. A desire for more outdoor learning spaces is being expressed by many schools. Opportunities (and challenges) exist with developing functional educational spaces outdoors on VSB sites – yet there are many existing examples which could be broadened through the District.

Seeking out green spaces is not limited to District sites. There are opportunities through local parks and other regional resources that allow for programming activities to connect with outdoor spaces.



Goal: Support outdoor focused spaces and activities at school sites

Action 6: Develop guidelines for new types of infrastructure

The facilities group through the grounds department is often asked to implement and administer new types of outdoor infrastructure. Learning gardens are a current example. Opportunities can be explored through regular consultation with Facilities and Grounds staff. The VSB garden guideline is a successful example of an educational infrastructure guideline. This action will work to develop District-wide guidelines for the implementation of outdoor infrastructure.

Action 7: Engage community partner groups and First Nations to enhance outdoor learning activities

There are numerous community partners that actively support green space education in our District. These include community organizations, non-profit groups, educational organizations, First Nations, and to a lesser degree the for-profit sector. These groups have developed and/or hold knowledge and expertise, and many have developed long-standing relationships with educators

Example activities could include:

- identifying groups that can bring knowledge and practice to schools
- partnering on (or supporting) grant funding applications, networking and sharing of activities through the District
- supporting engagement with local First Nations elders and knowledge keepers
- finding ways to support the non-profit sector's educational activities

Theme: Resource Conservation and Climate Change

Conserving resources and reducing waste are cornerstones of any organization's sustainability initiative. Waste reduction and recycling are common entry points for individuals to think about the impact of their day-to-day activities on the environment. There are educational, environmental, and business case benefits for reducing our collective impact on the planet.



Goal: Reduce energy consumption and greenhouse gas emissions

Action 8: Maintain an active energy management program

The District has been actively pursuing energy conservation for over a decade. This has resulted in avoided electricity costs of over \$700,000 annually and has captured incentive funding from BC Hydro and Fortis BC. The energy management program is working to complete a five year conservation target in 2018 and work is underway to develop an updated plan with new targets. The Provincial Climate leadership plan requires the 10-year plan to be developed. In this Action the District will:

- continue the energy management program in partnership with BC Hydro and Fortis BC
- Develop a 10-year energy and greenhouse gas reduction plan

Action 9: Develop a Climate Change Adaptation Strategy

The BC Climate Leadership Plan (<https://climate.gov.bc.ca/>) requires all public sector organizations in BC to develop 10-year emissions reduction, and climate change adaptation plans. The climate changes that are forecast for the coming decades will have a range of implications for the District. For example these could impact the variety and health of plants and trees grown on site, design standards for new facility construction, and facility components from roofing to drainage systems.

Adapting to these changes will require the District to be proactive. In this action the district will:

- conduct a review of the risks associated with climate change to the district operations
- develop a climate adaptation plan(s) for relevant infrastructure
- work with the Provincial Climate Action Secretariat to share and learn from other public sector organizations

Goal: Reduce consumption of resources and waste generation

Action 10: Implement long-term resource conservation initiatives

Waste generation, material consumption, and water conservation are common cited concerns for the VSB community regarding sustainability. These issues are visible and tactile and making change in these areas is immediately noticeable. The District implemented organics diversion from the waste stream – as part of the Metro Vancouver organics ban from landfill. There are opportunities to improve our compliance and efficiency in this area. For this action the District will work to:

- improve waste diversion efficiency through facility and promotional improvements
- develop a multi-year water conservation initiative

Action 11: Support school-level conservation projects

Innovation in conservation has often originated at the school level. The District recycling programs evolved from initiatives started at the school-level. Supporting new activities helps to define what works and what can be scaled-up. Examples that have been identified include:

- zero waste challenges
- classroom ‘energy diets’
- specialty product recycling
- equipment and appliance recycling

Action 12: Develop VSB-relevant resources and guides for schools

Developing new initiatives at schools can be challenging due to time and resource constraints. “Trail-blazers” often learn through a trial and error process. There are opportunities to share and trade these hard-learned lessons between school communities. Examples could be sustainability guides, pro-d programming, and other resources for staff and educators. These activities will be pursued by the District as the needs are identified by the school communities.

Theme: Sustainable Transportation

Active transportation to-and-from school promotes health, reduces carbon and combustion emissions, and reduces vehicle congestion at school sites. For many schools (particularly elementary) the community school catchments are suitable for walking and cycling. Where active transportation is not an option, the lowest carbon-emitting options should be supported for staff as well as students.



Goal: Support active transportation choices for school communities

Action 13: Promote active transportation events and training

Many schools participate in active travel events like bike-to-school week, or walk-to-school week. There are opportunities to expand these to other schools through promotion and support.

Action 14: Improve infrastructure for cycling, wheeling, and walking

Facility actions have increased bicycle lock-up and storage facilities at many sites. There is still a demand in the District for more infrastructure - and many locations could have improved placement of bike racks. In this action the VSB will review and periodically inventory the infrastructure in place at schools and evaluate for improvements.

Goal: Support low-carbon transportation

Vehicle transportation will be an inevitable and required choice for many components of the school community. Actions can be made to promote and incentivize choices that have a reduced environmental impact.

Action 15: Promote low-carbon transportation within the VSB

The City of Vancouver is committed to expanding EV charging infrastructure throughout the City. Grant funds are periodically available to implement EV charging facilities. For this action, the district will:

- continue to pursue the deployment of electric vehicle charging infrastructure at new sites through the seismic mitigation program
- evaluate opportunities to retrofit existing facilities for EV charging infrastructure.

The District has a fleet of vehicles and equipment required for its activities. The workshop has deployed three electric vehicles within its maintenance fleet on a pilot test. Given the relatively short travel distances within the city, these have been effective at moving some crew teams. To foster the lowest carbon operations possible the District will:

- continue to monitor and report vehicle carbon emissions
- evaluate suitability of EV or hybrid service vehicles for new fleet vehicles

Theme: Leadership in Sustainability

Being the *most* sustainable school district requires that the District take a leadership role. This theme demonstrates the District's commitment to the sustainability plan. Continuous and incremental improvement in our operations and activities is required. To understand this progress the district needs to monitor and report transparently and honestly. Walking the talk is an important component of being sustainable - and showing to our school- and stakeholder-communities that we are committed.



Opportunities exist to learn and share with other Districts. Many of the challenges facing the Vancouver area are also experienced by other school districts in BC. The VSB is positioned to be a leader and to learn and share with other school districts.

Goal: Lead by Example

Action 16: Continuously improve and update policies and practices

Clarifying policies, and developing some standardized practices in certain areas can streamline activities and provide internal and external clarity about expectations. This action will:

- review the existing VSB policy manual in relation to sustainability-related items and make recommendations for revisions or new policies
- review VSB purchasing activities periodically to identify opportunities to become more sustainable
- maintain and update VSB building standards - specifically reflecting energy and water conservation targets
- respond to policy-development needs where gaps or uncertainties exist
- share and exchange learnings and ideas with other school districts

Action 17: Report on progress

Reporting provides an opportunity to formalize the tracking of activities, compile data for quantitative metrics (if appropriate), seek feedback from our stakeholders, and review and revise actions. It provides information to the school communities, provides inspiration to others, and demonstrates the commitment of the organization.

In this action, the district will:

- continue to grow respectful relationships with stakeholder groups, invite their input, and share our stories and progress in turn
- provide annual updates to committee on sustainability activities
- prepare a district sustainability progress report every two years and present it to the board via committee
- conduct a review of the sustainability action plan after 5 years.

Being “*the Greenest, most sustainable*”

Organizations moving to become more sustainable often describe the process as a journey. Part of that journey is to recognize that not all actions can be implemented immediately and that there will always be time and resource limitations. As the first VSB Sustainability Plan, the activities developed here are a solid beginning, and represent a substantial amount of work and effort. This section describes an evolutionary path to incremental improvements, and highlights some “big ideas” that are possibilities for the future.

The Evolution of Sustainability in an Organization

Green and sustainable activities in organizations are usually spearheaded by individual champions that see a need and step up to address it. Classic examples are recycling and composting initiatives started by a person or small group that is frustrated with waste generation in a lunchroom!

The implementation of the sustainability plan seeks to find ways to build upon the efforts of these individuals and to leverage that effort further in the District. This next step – to move “beyond champions” presents an opportunity to expand the breadth and scope of initiatives for all of the VSB communities to participate in. There is an evolutionary path from individual action to a network of connected participants, until these networks of activity become established operating norms. At that point these activities are no longer a unique or special activity, but rather a routine component of the organization’s business planning.

This process is ongoing and it will take years for some activities to become standard practice. Others may be adopted swiftly by either regulation or policy directive. This plan hopes to enable the progression of many different initiatives along this evolutionary pathway.

“Thinking Big!” Great aspirational ideas

In the short term, the actions described in this plan might not appear to get us to the point of declaring ourselves “the greenest, most sustainable school district”. Often it is too easy to see the immediate obstacles, the obvious barriers, and the limitations of what one person or ‘only a few’ can accomplish. This plan sets the direction for greater strategic alignment, better-leveraged initiatives, and lasting impact.

Initially there will be incremental change rather than a dramatic shift. Many of the ideas and actions are already underway somewhere in the district. To support a big picture vision of the future we can “imagine a future possibility” as a “dream big” statement.

Examples of “think big” aspirations (cited by survey and workshop respondents) include:

- the district creates a sustainability mini-school program
- there is a district sustainability “educator in residence”
- we build a net-zero energy school

- we have a zero waste school
- students take and commit to a sustainability pledge
- “Every student plants a tree!”
- there is a secondary student “U-pass” (subsidized bus pass) program
- that staff develop active car-pool programs
- that an endowment be created for funding sustainability initiatives
- that all (many) school districts in BC develop a common visionary statement on support for sustainability for the K-12 sector

This plan is a start! In subsequent years of implementation there will be new ideas and 'big actions to chase'. Periodic review will prove an opportunity to build, expand, and strengthen these initiatives.

Making it Happen: Implementation

Implementation Principles

The plan development highlighted the need to take a strategic- and focused-approach towards advancing sustainability in the organization. A component of this focus is to evaluate and develop activities as they relate to the core function of the organization. From this perspective a number of core “filters” or “implementation principles” have been developed to guide opportunities in the District.

Education is our Leverage

The District’s unique opportunity to advance sustainability comes through our function as educators. It will be advanced through the core mandate to help students reach their potential as conscientious, critical thinkers. This means that many of the District’s sustainability actions should pursue opportunities through the lens of “*What is the learning / curriculum opportunity?*” Activities should be supportive and enriching to education. Educators will find and build these connections in a variety of ways.

Follow student and teacher interests & support our people

This is not a ‘top-down’ plan. It is not to impose a set of activities. The District’s actions will be guided by student and educator interests and needs. The many, many champions operating individually or as part of a group are to be supported – not ‘imposed upon’. The District as an organization will endeavor to follow those interests and support them.

Make our efforts lasting

There will always be financial, resource, and time constraints to achieving our vision. Coupled with that, our staff learn, grow, change locations, and retire, and our student body is continuously being refreshed and then graduating away from us.

To make progress, we need to focus efforts on initiatives that are lasting. This means that the District’s and partner’s efforts will endeavor to be stable year to year, create lasting impact through infrastructure changes and program development. We will endeavor to support transition and succession as staffing evolves over time.

Resources

To properly implement this plan, stable resources will be required. Past activities have been funded by grants and partner relationships. Future funding must develop through longer term multi-year mechanisms. Sources of time or funds are expected to come from:

- current staffing. Many sustainability activities have already been developed by staff as part of their current roles
- grant revenue (e.g. utilities, charitable foundations, etc.)

- partnerships with educational or municipal agencies that have a mandate aligned with this plan (e.g. UBC)
- non-profit organizations that provide educational programming. There are numerous non-profit organizations currently operating through educators and these provide a benefit to students and the organization

Engagement

Implementation of the plan will be a mix of defined and planned multi-year activities, combined with 'opportunistic implementation' as activities or new funding sources present themselves. There will be an annual planning process to define which activities to implement each school year.



Some key aspects of the implementation are:

- **Voluntary Participation:** Educators and administrators are invited to engage with sustainability-themed activities as they see best for their classrooms and school. This plan respects educators' autonomy in delivering the curriculum.
- **Stakeholder Consultation:** Implementing new activities often requires the involvement of a number of different staff groups. Implementation will respect those staff arrangements and seek input from affected groups as activities and actions are developed.
- **Building Relationships:** In a complex environment such as a large school district, there are always opportunities to build new relationships between educators, administrators, and all the staff groups that support them. Efforts in this plan are intended to support and promote valuable working relationships between staff.

Part of the implementation will include communication through multiple channels from multiple levels of the organization. This includes the stakeholder groups and their communications, the senior management team, and the many staff to staff connections throughout the district. Several activities have been identified to support improved communication.

Oversight and Reporting

The advisory group created to provide input to this sustainability plan felt that there is value to continuing as a working group / advisory group through the implementation stages of the plan. Proposed meeting frequency was 3-4 times per year.

The sustainability plan will continue to report through the committee structure to the board. Annual updates will be provided to regarding specific year work plans. As well, it is proposed that as part of its work activities that the District create a comprehensive bi-annual or tri-annual progress report.