Healthy Schools BC

Final evaluation report













Acknowledgements

Between September 2013 and March 2016, the Healthy Schools BC evaluation was implemented by Context Research (Dr. Kerry MacKelvie and Lindsay Richardson), and was led and coordinated by PHSA in collaboration with DASH BC and the BC ministries of Health and Education. Evaluation oversight was provided by the Evaluation Advisory Team, consisting of Dr. Drona Rasali, Bethany Elliott, and Jesse Veenstra (PHSA), Meghan Day and Scott Beddall (Ministry of Health), Sanja Ristic (Ministry of Education), and Daniel Naiman, Kathy Cassels, and Rebecca Gibbons (DASH BC).

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Foreword

The Healthy Schools BC initiative, first launched in 2011, aims to strengthen health-education partnerships and promote student health and educational outcomes through a comprehensive school health approach. We are pleased to present the Healthy Schools BC final evaluation report, concluding an evaluation of Healthy Schools BC carried out over three years.

Over the course of the evaluation, we heard from thousands of teachers, administrators, students, and health authority staff on the successes and challenges of creating healthier school settings through a comprehensive school health approach. This evaluation report presents this data and will inform the ongoing development of the Healthy Schools BC initiative in the years to come. We look forward to applying what we have learned through the evaluation, and reassessing some of our key measures of success in the next few years.

Central to the success of this initiative, are the many teachers, administrators, students and health authority staff working to create healthier school environments in BC. We appreciate their efforts and dedication to the health and education of our students.

As we continue to support this important initiative, we hope to realise its intended impacts on the health outcomes over time in the settings where the students live, study and play.

Finally, thanks are due to the participants from the health authorities and school communities as well as the members of the evaluation advisory team for completion of this evaluation exercise.

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Contents

Fore	eword	ii				
Glos	ssary					
1.	1. Introduction					
	1.1	Initiative background				
	1.2	Evaluation background				
2.	Evaluati	on methods and activities				
	2.1	Online surveys with health authority staff				
	2.2	Online surveys with school district representatives				
	2.3	Online surveys with educators and school administrators				
	2.4	Learning session surveys with health authority staff and educators				
	2.5	Online surveys for student engagement				
3.	Evaluati	on findings				
	3.1	Cross-sector partnerships				
	3.2	Coordination and consolidation of school-based healthy living programs				
	3.3	Capacity building - knowledge exchange and skill development				
	3.4	Capacity building - assessment, planning and implementation tools				
	3.5	Student engagement				
	3.6	Healthy Schools BC outcomes				
4. Synthesis and future considerations		is and future considerations41				
	4.1	Cross-sector partnerships				
	4.2	Coordination and consolidation				
	4.4	Capacity building				
	4.5	Student engagement				
	4.6	Healthy Schools BC outcomes				
	4.7	Conclusions				

Glossary

Healthy Families BC (HFBC) HFBC is British Columbia's comprehensive health promotion strategy and program. Delivered by the Ministry of Health, <u>Healthy Families BC</u> is aimed at improving the health and well-being of British Columbians at every stage of life. It focuses on reducing chronic disease through the promotion of lifestyles and environments that support health.

Healthy Schools BC (HSBC) A key initiative within Healthy Families BC, Healthy Schools BC was designed to strengthen health-education partnerships and enhance the capacity of both sectors to effectively implement healthy schools initiatives using a comprehensive school health approach. The initiative involves a partnership between the Ministries of Health and Education, Directorate of Agencies for School Health BC, health authorities, education partners and other key stakeholders.

Comprehensive School Health (CSH) <u>Comprehensive school health</u> encompasses the whole school environment with four inter-related pillars: relationships and environments, teaching and learning, community partnerships, and school policies. When these pillars are addressed together, students are supported to realize their full potential as learners and healthy members of society.

Healthy Schools Network (HSN) The <u>Healthy Schools Network</u> is a voluntary community of educators and schools in BC who are working in classrooms, schools, and school districts toward optimizing student health and learning, meeting healthy living goals, and improving overall student well-being. The HSN provided Inquiry Grants (for Inquiry Projects) and Activity Grants to schools, to support healthy living initiatives that were relevant and meaningful in unique school contexts. Educators were encouraged to use an inquiry approach to engage students in healthy living.

Healthy Living Youth Council (HLYC) The <u>Healthy Living Youth Council</u>, which operated during the 2013-2014 school year, was a committee of high school students from all over BC. The council employed a "for youth, by youth" model of engaging students in healthy living activities in their school communities. The purpose of the HLYC was to give students the opportunity, tools, and support to ask questions, provide feedback, and apply their ideas towards promoting healthy living and healthy schools. The HLYC was an activity within the student engagement component of Healthy Schools BC.

Student Healthy Living Network (SHLN) Initiated in the 2014-2015 school year under the student engagement component area of HSBC, this network allowed for more students to become involved in healthy living and leadership activities with support from the Healthy Schools Network. The Student Healthy Living Network had a much broader, but less intensive reach than the smaller Healthy Living Youth Council in previous years.

Healthy Schools Leadership Symposium Facilitated by DASH, this annual <u>symposium</u> involves stakeholders from around the province who are committed to creating healthier schools and healthier learners. The symposium showcases provincial and regional healthy schools work, advances CSH learning, and supports partnership development.

Evaluation cycles Evaluation cycle 1 occurred between October 2013 and March 2014. Evaluation cycle 2 occurred between April 2014 and March 2015. Evaluation cycle 3 occurred between April 2015 and March 2016.

1. Introduction

1.1 Initiative background

Healthy Schools BC (HSBC) is a key initiative within Healthy Families BC, the provincial health promotion strategy launched by the Ministry of Health in May 2011. At that time, Healthy Schools BC was built to address recognized needs for (1) more coordination and partnerships in the wide array of school health programming operating in BC, and (2) more support to the education sector in delivering healthy schools programming. To this end, HSBC was designed to strengthen health-education partnerships and enhance the capacity of both sectors to effectively implement healthy schools initiatives using a comprehensive school health (CSH) approach.

The objectives of HSBC are:

- To support a coordinated, evidence-based approach to healthy schools across BC;
- To build capacity of both the health and education sectors to effectively implement healthy schools initiatives using a CSH approach; and
- To facilitate student participation and leadership regarding CSH practice in BC.

HSBC has four component areas that support the planning and implementation of a CSH approach:

Cross-sector partnerships: To increase partnership and collaboration between health, education and community sectors to support the implementation of the CSH approach within schools, school districts, and regions.

Coordination and consolidation: To improve the coordination of existing school-based health promotion programs and resources.

Capacity building: To build the capacity of health authority staff and education partners at the school and district/regional levels to create healthy schools; and to help schools, school districts and education partners plan, implement and evaluate healthy schools initiatives.

Student engagement and leadership: To facilitate student participation and leadership in healthy schools initiatives.

The HSBC initiative involves a partnership between the Ministries of Health and Education, Directorate of Agencies for School Health BC (DASH), health authorities, education partners and other key stakeholders. DASH is leading the implementation of many components of the HSBC initiative, including the development and distribution of resources and tools, facilitation of knowledge exchange opportunities, and coordination of communications and strategic planning. Regional health authorities are responsible for working collaboratively with school districts and schools to support their assessment, planning and implementation of healthy schools activities, and provide input to guide consistent provincial implementation of HSBC

initiatives. The Provincial Health Services Authority (PHSA) supports HSBC by providing coordination for the HSBC evaluation, contributing to the development and monitoring of provincial indicators of success, and reporting on provincial measures of student health and well-being. A summary of HSBC activities within each component area is presented in Table 1.

	Led by DASH	Led by Health, and involving other HSBC partners		
Cross-sector partnerships	 Facilitated health authority and school district consultations. Facilitated shared learning sessions with health authority and school district staff to build skills and confidence in working with cross-sector partners. Hosted annual Healthy Schools Leadership Symposium. Provided School District Readiness Grants to 17 school districts to support partnership building efforts with their regional health authorities, and work towards creating and implementing a shared plan of action. 	 Health authority staff worked with teachers and school administrators to support the implementation of the CSH approach. Developed and shared contact lists for regional health authority and school district healthy schools leads. PHSA developed "Student Health in BC" report (2014) to share with HSBC partners. Initiated HSBC discussions with First Nations education and health partners, and explored future partnership opportunities. Provided feedback on the new draft K-9 Physical and Health Education curriculum. Ministry of Health represented HSBC health partner perspectives in the curriculum revision. 		
Coordination and consolidation	Developed the HSBC website to consolidate healthy schools resources, information and stories. Hosted a workshop with organizations that operate in schools to explore working together using a collective impact approach.	Convened provincial school-based healthy eating program providers to explore how to streamline and coordinate the delivery of programs, improve access to programs, and to develop common messaging and cross-promotion efforts.		
Capacity building	Provided train-the-trainer HSBC learning sessions for HA staff in all five regional HAs. Created and updated the HSBC website to include a Stories Map, tools and resources, and new sections on School Connectedness and Food Literacy. Launched the School Connectedness Capacity Building initiative, in partnership with the BC School-Centred Mental Health Coalition, to provide six grants of \$5000 to schools/districts working on school connectedness. Launched the School Food Literacy Capacity Building Initiative to provide grants and knowledge exchange opportunities to 20 school communities for projects that explore a CSH approach within food literacy.	Developed tools to support CSH and engagement knowledge exchange and skill development, including: CSH Knowledge Guide, Resource Guide for Teaching & Learning, CSH Resource for Health Professionals, HSBC Learning Framework, Assessment & Planning Tools, CSH Best Practice examples, CSH/HSBC Action Guides, Intersectoral Engagement Rubric, and School District Profiles. With DASH, RésoSanté Colombie-Britannique, and Conseil Scolaire Francophone, developed and implemented the HSBC Francophone Initiative, including a French version of the HSBC website, translation of key HSBC resources, and "Caravane Santé", a tour to six Francophone and French immersion schools to celebrate Healthy Schools activities, build knowledge around CSH and the new resources, and strengthen connections with local health partners.		
Student engagement and leadership	Established the provincial Healthy Living Youth Council in 2012-2013. Council members developed and implemented healthy schools inquiry initiatives within their schools. Provided Healthy Schools Network grants to schools to support healthy living and inquiry projects with a focus on engaging students in the CSH process (158 grants in 2013/14; 308 in 2014/15; and 206 in 2015/16). Established a BC Student Healthy Living Network of 35 students to lead healthy living initiatives in their school communities in 2014-2015	Established a subcommittee of the Healthy Living Youth Council to develop a provincial student engagement strategy for healthy schools.		

Table 1. Summary of activities within HSBC component areas, June 2011 – February 2016.

their school communities in 2014-2015.

1.2 Evaluation background

In July 2013, an evaluation plan, focusing specifically on the implementation, efficiency and effectiveness of the initiative, was finalized by DASH, the Ministries of Health and Education, and PHSA, with input from the regional health authorities. It was expected that the plan would remain flexible to changes in the initiative's activities. At a high level, the evaluation plan was built around the initiative logic model, which focused on the relationships between HSBC's key activities and a core set of short/medium term outcomes:

- Increased use of provincial healthy schools resources;
- Increased health authority staff and education stakeholder knowledge/skills associated with the CSH approach;
- Improved coordination of healthy schools initiatives; and
- Organizational culture (schools and health authorities) is supportive of CSH.

In September 2013, the BC Ministry of Health commissioned an evaluation project to implement the HSBC Evaluation Plan over a 3-year period. On behalf of DASH, PHSA led and managed the 3-year evaluation project, working with Context Research and an Evaluation Advisory Team that had representation from PHSA, DASH, and the Ministries of Health and Education. Evaluation cycle 1 occurred between October 2013 and March 2014 (report finalized November 2014), and evaluation cycle 2 occurred between April 2014 and March 2015 (report finalized June 2015). Evaluation cycle 3 took place between April 2015 and March 2016 (report finalized July 2016). Context Research, with the Evaluation Advisory Team, completed a major review of evaluation tools and methods and restructured the plan to improve efficiency in the third cycle. This report is presented as the final report of the three years of evaluation, and provides an overview of the HSBC evaluation methods and results, focusing on the third cycle of evaluation. It includes comparisons to previous years' results (cycle 1 and cycle 2), where possible. A summary with future considerations for HSBC is provided at the end of the report.

We acknowledge that each health authority has the flexibility to regionalize its HSBC activities, in accordance with its own unique set of assets, opportunities and challenges. In addition, some regional health authorities underwent significant and prolonged organizational restructuring that impacted their implementation of HSBC activities. For these reasons, the stage of and approach to implementation of the HSBC initiative varies across health authorities - this may explain regional variations in the number or type of supports offered, or awareness of some resources over others. As such, presentation of results by health authority was not intended for comparison to each other, but rather to reflect the different approaches and stages of implementation across the province.

2. Evaluation methods and activities

2.1 Online surveys with health authority staff

We used an online survey at three data collection time points (December 2013, January 2015, December 2015) with health authority staff to explore:

- Health authority capacity and support for schools and districts to implement a CSH approach;
- Health and education sector partnerships; and
- Awareness and use of HSBC knowledge exchange and skill development opportunities and tools.

We emailed health authority staff to participate in the online survey via FluidSurveys. Each year, Health Authority Leads participating on the HSBC Health Authority Project Team provided updated lists of health authority staff active in healthy schools issues and initiatives. Table 2 shows the response rate by health authority for each data collection cycle. In each cycle, the greatest concentration of responses was from public health nurses working with schools (in the range of 60%). We analyzed data descriptively within the pooled sample and also ran cross-tab analyses by health authority. Examining results across health authorities resulted in some smaller comparison groups, and these results should be interpreted with caution.

	Cycle 1: December 2013		Cycle 2: January 2015		Cycle 3: December 2015	
Health authority	Number of respondents	Response rate	Number of respondents	Response rate	Number of respondents	Response rate
Northern Health	17	25%	21	30%	23	25%
Fraser Health	10	21%	26	49%	23	37%
Interior Health	6	46%	22	46%	19	40%
Vancouver Coastal Health	11	85%	29	59%	23	48%
Island Health	34	83%	26	46%	30	59%
Total	78	43%	124	45%	118	40%

Table 2. Number of health authority staff respondents and response rate for online survey in each data collection period, by health authority.

2.2 Online surveys with school district representatives

We used an online survey at three data collection time points (December 2013, January 2015, December 2015) with school district representatives to explore:

- Communication and partnerships with the local health authority;
- Awareness of CSH and HSBC;
- Awareness and use of health authority supports to plan and implement healthy schools initiatives;
- Awareness and use of HSBC tools and knowledge exchange and skill development opportunities; and
- Healthy schools priorities, and the development of healthy schools plans, policies, goals and committees using a CSH approach.

We used direct email to contact the school district Healthy Schools Leads (60; one per school district) to participate in the online survey via FluidSurveys. Table 3 shows the response rate across health authorities for each data collection cycle. We analyzed data descriptively within the pooled sample.

Table 3. Number of school district respondents and response rate for online survey by school district and health authority.

	Cycle 1: December 2013		Cycle 2: January 2015		Cycle 3: December 2015	
Health authority	Number of school districts responding	Response rate	Number of school districts responding	Response rate	Number of school districts responding	Response rate
Northern Health	5	42%	6	50%	8	67%
Fraser Health	4	36%	4	36%	4	36%
Interior Health	8	50%	13	81%	11	69%
Vancouver Coastal Health	3	38%	4	50%	4	50%
Island Health	6	50%	5	42%	3	25%
Provincial School District SD93 (Francophone)	1	100%	1	100%	1	100%
Total	27	45%	33	55%	31	52%

2.3 Online surveys with educators and school administrators

We used an online survey at three data collection time points (December 2013, January 2015, December 2015) with schools (i.e., teachers and school administrators) to explore:

- Awareness and use of health authority supports;
- Awareness and use of HSBC supports, resources and tools;
- Awareness of CSH and HSBC;
- Participation in, and satisfaction with, HSBC knowledge exchange and skill development opportunities;
- The coordination and consolidation of school-based healthy living programs; and
- Changes at the school level as a result of HSBC activities.

We used a variety of strategies to recruit survey participants, including direct mail to previous survey participants, Healthy Schools Network teachers, and to educators at independent schools via member communications from the Federation of Independent Schools Association, and through e-newsletter advertising via the BC Teachers Federation and the BC Principals and Vice Principals Association. Survey respondents were mostly teachers (80%). Table 4 shows the distribution of educator responses across health authorities for each data collection. We analyzed data descriptively within the pooled sample and also ran cross-tab analyses by health authority on some questions.

Health Authority	Number of Responses December 2013	Number of Responses January 2015	Number of Responses December 2015
Northern Health	33	87	39
Fraser Health	121	426	260
Interior Health	85	225	105
Vancouver Coastal Health	74	277	122
Island Health	104	218	112
Independent schools (did not designate health authority in cycle 1)	22	-	-
Total	439	1233	638

Table 4. Number of educator and administrator respondents for online survey, by health authority.

Note: Response rate calculation not possible due to broad recruitment strategy.

2.4 Learning session surveys with health authority staff and educators

We used learning session feedback forms to gain feedback from participants in DASH BC learning sessions and health authority-led learning sessions during the three years of evaluation. The learning sessions aim to increase knowledge, capacity and skills related to HSBC and CSH, and between 2013 and 2016, were primarily targeted at health authority staff. A summary of the locations and participants for these sessions is provided in Table 5.

The purpose of the feedback form was to assess:

- Satisfaction with the learning session;
- Increased knowledge of CSH;
- New skills to support schools in implementing a CSH approach;
- Increased capacity to engage the education or health sector; and
- Increased knowledge of the health authority/education sector role within a CSH approach.

Table 5. Number of completed participant feedback forms for HSBC learning sessions conducted between April 2015 and February 2016.

Reporting period Region		Health sector participants	Education sector participants
Cycle 1 Island Health		62	0
Cycle 2	Northern Health	15	0
Cycle 2	Fraser Health	16	0
Cycle 2	Vancouver Coastal Health	13	0
Cycle 3	Vancouver Coastal Health	6	9 (SD 47)
Cycle 3	Vancouver Coastal Health	11	5 (SD 48)
Cycle 3	Interior Health Authority	26	0

Note: There were few participants from the education sector, as these sessions were primarily targeted at health authority staff. The education sector participants from SD 47 included 3 teachers, 1 early learning coordinator, 1 speech language pathologist, 1 school psychologist, 1 special education coordinator, 1 school counsellor, and 1 elementary school district counsellor, and from SD 48 included 4 teachers and 1 principal.

2.5 Online surveys for student engagement

During spring 2014 and 2015, we assessed student engagement within the HSN projects, through a survey DASH distributed to teachers following their involvement in the Inquiry and Activity Grant projects. In total, 27 and 63 educators completed the HSN Inquiry Grant survey in 2014 and 2015, respectively, and 30 and 83 educators completed the HSN Activity Grant survey in 2014 and 2015, respectively. Educators were from both elementary and secondary schools.

We conducted online surveys for students who participated on the Healthy Living Youth Council (2014), the Student Healthy Living Network (2015), and within HSN inquiry projects (2015), and distributed this via their teachers. Survey participants included eight Healthy Living Youth Council students (2014), and 35 students who led HSN Inquiry Projects via association with the Student Healthy Living Network (2015), and 23 students who were involved in inquiry projects but not involved in the Network (2015). Generally, the purpose of the surveys was to assess the impact of participation on students' health literacy and understanding of the school and community impacts on health, as well as students' leadership skills and involvement in their learning.

3. Evaluation findings

3.1 Cross-sector partnerships

Evaluation in this component area focused on assessing the availability and uptake of supports provided by health authorities to the education sector, how existing supports have facilitated the partnering process, and various stakeholders' perspectives on the evolving strength of healthy schools partnerships. The findings relating to perspectives from health authority staff, school district representatives, and educators and school administrators are presented.

Support from health authorities to school districts and schools for comprehensive school health

Within HSBC, health authority staff have been trained and guided in providing support to the education sector so that a CSH approach can be broadly implemented in BC schools. The extent of this training varied significantly across health authorities, and across various positions within the health authorities. Through the evaluation, we assessed whether health authority staff were providing support, and felt they had the capacity to do so, and whether educators and school districts were aware of and using health authority supports.

Figure 1 shows the cycle 3 data regarding provision of HSBC support from health authority staff perspectives. It was most common for health authority staff to indicate that they provided "tools, guides and resources" (75%), and "links to community partners or services" (67%), to school districts and schools to help them implement a CSH approach. The provision of "school district health profiles" (23%) and "implementation or evaluation support" (25%)

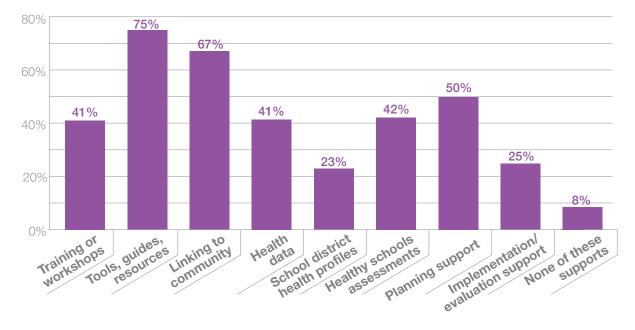
Evaluation questions: Cross-sector partnerships



- What support(s) do health authorities provide to schools and districts?
- What supports are school districts and schools aware of and using?
- Do health authority staff have the capacity (knowledge, time, skills, tools) to support schools and districts in implementing a Comprehensive School Health approach?
- Do school districts communicate with their regional health authority?
- Do health authority staff participate in school districts' and schools' healthy schools assessment, planning, implementation, and evaluation activities?
- Do educators feel that support from their health authority makes them stronger in assessing, planning, implementing, and evaluating healthy school activities?
- Have health-education partnerships strengthened?

were the supports that were provided the least often over the years. These results were similar in cycle 2. Overall, the majority of health authority staff indicated that their health authority provided support to school districts and schools to help them implement a CSH approach.





School district representatives were asked about their awareness and use of various health authority supports. Awareness was highest for "providing tools, guides and resources" and "linking to community partners or services", which was in agreement with the health authority staff's indication of supports most commonly provided (Figure 2). Many were also aware of health authorities' provision of "planning support". For those that were aware of various supports, use was moderately high for most supports (56% - 83% in cycle 3, depending on the specific support), while a lower level of use was reported for "supporting healthy schools assessments" and "implementation or evaluation support" (45% and 43% in cycle 3, respectively).

Similar to the school district results, awareness was highest for "providing tools, guides and resources" (43%) and "linking to community partners or services" (38%) among educators and school administrators (Figure 2). Awareness of "training or workshops" (36%) was a close third. Awareness of other supports tended to be low (<20% in cycle 3). Educators' and school administrators' awareness of health authority supports tended to be lower than school district representatives' awareness of supports. For those that were aware of various supports, reported use of the support was moderately high for the three supports that had the greatest awareness ("training or workshops", "providing tools, guides and resources", and "linking to community partners or services", >60% use in Year 3), while lower use (<50% in Year 3) was reported for all other supports. Rates of use for all supports were generally similar across years.

HSBC initiative in action:

Partnerships increase New Westminster's capacity to create healthy schools

With assistance from Healthy Schools BC Readiness Grants, New Westminster's School District 40 and Fraser Health are forging stronger partnerships with each other and the community, and taking steps towards implementing a CSH approach across the district.

Building off their long-standing relationship, the school district and health authority wanted to create a Healthy Schools Action Plan. As a first step, they formed an ad hoc committee that included representatives from the school district, health authority and city, to conduct an environmental scan. The results were shared at a community brunch, and participants chose ten priorities under each of the CSH pillars. Having the event on a Pro-D day resulted in a wide cross-section of stakeholders attending, including nearly two dozen youths.

A follow-up survey then helped the committee narrow down the priorities under each pillar. Three themes were important across all pillars: authentic youth engagement; involvement of community in student health; and expansion of partnership and services. A second phase of funding supported the creation of a formal Healthy Schools Committee that includes representation from the district, health authority and the city.

"There was interest in integrating the CSH approach for years, and we recognized the timing was right to take the opportunity. The Readiness Grant really helped make this happen, and the school district is very supportive."

Betina Wheeler, Community Program
 Development Officer at the school district

With respect to organizational capacity, the majority of health authority staff indicated that they had the knowledge, skills and tools to provide support to school districts and schools (77-89% agreed they had adequate capacity, cycle 3) (Figure 3). A lower proportion of health authority staff believed they had the time to support school districts and schools (46%). This data was generally consistent across health authorities, and across data collection cycles. In each year of the evaluation, it was apparent that DASH HSBC Learning Sessions made an impact on health authority staff's perceived capacity to support the education sector in implementing CSH (see Section 3.3).

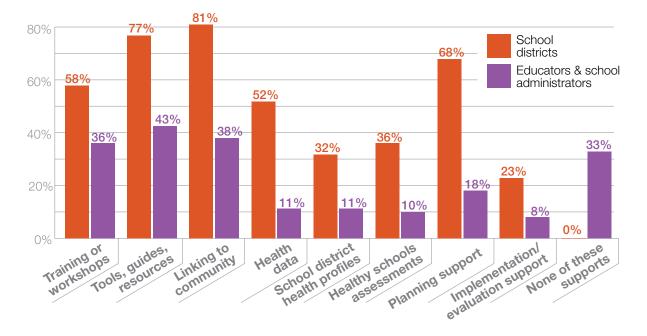
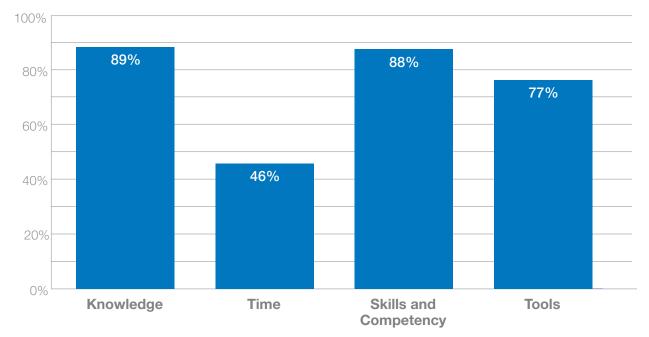


Figure 2. Percent of school district representatives and educators and school administrators indicating that they were aware of various HSBC supports provided by the health authority. (School district survey, and educators and administrators survey (cycle 3), BC, 2015).

Figure 3. Percent of health authority staff indicating that they had capacity (knowledge, skills and competency, tools, and time) to support schools and school districts in implementing a Comprehensive School Health approach. (Health authority survey (cycle 3), BC, 2015).



Participation and partnerships

Through the HSBC evaluation, we examined whether school districts were communicating with their regional health authority, how health authority staff were participating in healthy schools work with school districts and schools, and the extent to which educators felt that this participation or support made them stronger in their healthy schools approach. We examined perspectives from all stakeholders on whether partnerships had strengthened within HSBC.

Over the years, school district representatives increasingly indicated that they communicated with their local health authority (74%, 88%, and 90% in cycles 1, 2, and 3 respectively). This reflected a continued, growing interest from school districts in having their health authorities participate in healthy schools activities.

Health authority staff most commonly participated in school health planning with school districts and schools (27% and 40%, respectively in cycle 3). This was consistent across data collection cycles. Health authority staff reported more participation in school health activities with schools than with school districts. Some subtle changes were noted in participation from cycle 2 to cycle 3. At the school district level, there was a shift away from school health assessment towards school health implementation. At the school level, school health assessment, planning and evaluation were increased, while there was a slight decrease in school health implementation. The percentage of health authority staff who indicated that they did not participate in any school health activities with school districts and schools decreased from cycle 2 to cycle 3. Although HSBC sought improvements in participation, it was not expected that all health authority staff would be working in all of these healthy schools areas given the many differences in roles across staff.

Figure 4 and Figure 5 show the variation in participation across health authorities, and these data provide a good illustration of how HSBC was implemented differently across health authorities. For example, in the Interior Health region, the health authority funds positions within the school district to support healthy schools work. Responses from staff holding these positions would not appear in the health authority survey data, since these people are school district staff.

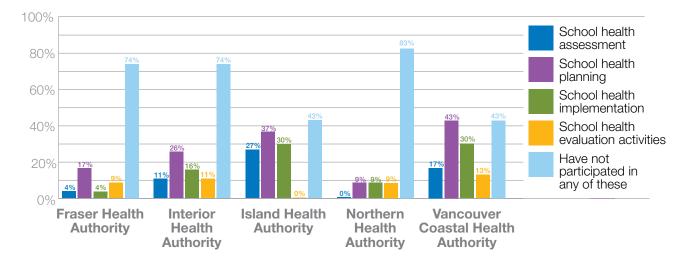
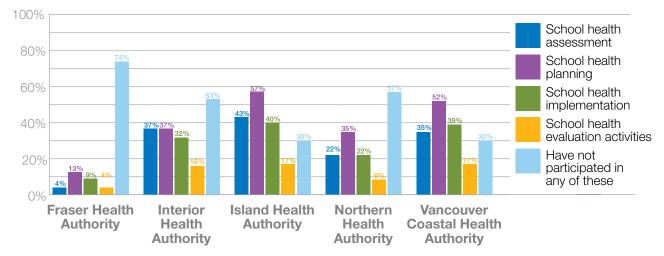
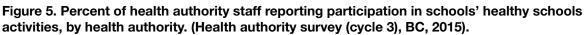


Figure 4. Percent of health authority staff reporting participation in school districts' healthy schools activities, by health authority. (Health authority survey (cycle 3), BC, 2015).



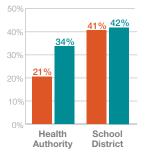


Educators and school administrators reported on the extent to which support from their health authority made them stronger in their healthy schools approach (i.e., conducting assessments of the existing school environment, planning healthy schools initiatives, implementing healthy schools initiatives, and evaluating healthy schools initiatives). Results were similar for assessments, planning and implementing, with 59%-61% of the respondents indicating that the health authority support made them stronger in these areas in cycle 3. A slightly lower proportion of educators and school administrators indicated that health authority support made them stronger in evaluating healthy schools activities (50% in cycle 3). There was a slight increase between cycle 2 and cycle 3 in the proportion of educators and school administrators agreeing that health authority support made them stronger in their healthy schools approach.

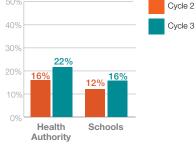
School district representatives had the highest proportion of respondents who believed that partnerships had strengthened over the last year in both cycles 2 and 3 (41% and 42%, respectively). For health authority staff, there was a higher proportion who indicated that their partnerships with school districts were stronger (34%) in cycle 3, compared to cycle 2 (21%) (Figure 6). There was a similar pattern to their partnerships with schools (22% indicated they were strengthened in cycle 3 as compared to 16% in cycle 2). There was a slight increase in the proportion of educators and school administrators who believed the partnerships with health were stronger from cycle 2 to cycle 3 (12% in cycle 2 to 16% in cycle 3).

Figure 6. Percent of stakeholders indicating that the cross-sector partnership had strengthened in the last year: (a) perspectives on health authority – school district partnerships, (b) perspectives on health authority – schools partnerships. (Health authority survey, school district survey, educators and school administrators survey (cycles 2 and 3), BC, 2015).

(a) Percent of health authority staff and school district representatives indicating that their partnership had strengthened over the past year



(b) Percent of health authority staff and schools (educators and school administrators) indicating that their partnership had strengthened over the past year



Twenty percent of health authority staff provided examples of strengthened partnerships with schools and benefits of greater partnering with the education sector on the health authority survey in cycle 3. The examples demonstrate the respondents' understanding of the benefits of partnering for healthy schools (see sidebar). Many of the examples of strengthened partnerships related to more collaboration across health and education, and the formation of new committees. Others indicated that strengthened partnerships helped initiate new healthy schools programs or initiatives, and some gave examples of strengthened partnerships that grew from following a CSH approach. Health authority staff indicated that the benefits of greater partnering with the education sector included increased collaboration, sharing and efficiency, increased connections across sectors and with the school community, and an increase in healthy schools activities that directly benefited students.

Similarly, school district representatives frequently indicated that multi-sectoral committees were key to a positive relationship with the health authority. Others described existing positive relationships, good communication, shared purpose, having a district Health Promoting Schools Coordinator and the health authorities' excellent services and relationship with schools as important to a positive relationship with health (see sidebar). On the other hand, school district representatives indicated that a lack of time to develop relationships, combined with high staff turnover and inadequate funding, continued to stand in the way of forming a relationship with the health authority. Infrequent communication, poor alignment of priorities, shortage of resources, and a lack understanding of roles consistently challenged the relationships between health and education.

Health authority staff rated elements (communications, commitment, and working towards shared goals) of their partnerships with school districts on their annual reporting. Compared to the ratings school district representatives provided on the online survey (Figure 7, cycle 3 data shown), a higher proportion of health authority staff (67%) than school district representatives (41%) rated communications with the school district as effective or highly effective. There was greater agreement in commitment to working together (65%, both groups). However, there was a large discrepancy in the reporting of working towards shared goals: 60% of health authority staff rated this as frequent or very frequent, in comparison to only 26% of school district representatives. This discrepancy speaks to the need for revisiting and redefining the shared goals of HSBC across the health and education sectors.

Healthy authority staff's examples of strengthened partnerships and benefits of partnering with schools:

"Working together on shared projects and events; e.g. multi-district mental health day; developing guidelines for anaphylaxis management; etc."

"Meeting with school superintendent on regular basis; meeting with school principals to do initial school health inventory and introduce CSH, and follow up meetings to explore other areas that may benefit from Healthy Schools project."

"Strengthened relationships make all of our [collaborative] work smoother."

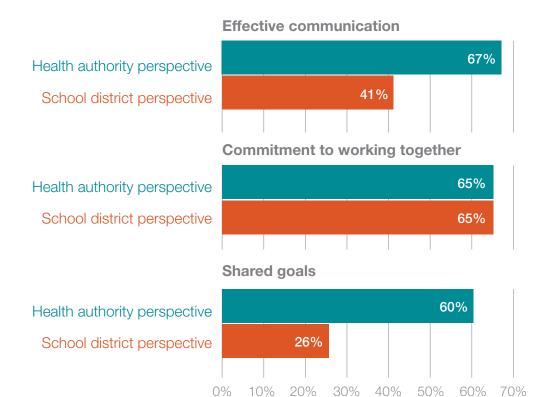
School district representative's illustration of what positively impacts their

what positively impacts their relationship with the health authority:

"We have a Health Promoting Working Group in [our school district] that has bonded the various sectors so that we can understand each other's language and identify issues and barriers to health. This multi-sector group meets 3 times per year, ... [and] values working together as a community using the CSH framework."

"Shared purpose, positive relationships, open dialogue."

Figure 7. Percent of health authority staff and school district representatives reporting effective or highly effective cross-sector communication, moderate to high commitment to working together, and frequently or very frequently working towards shared goals. (School district survey (cycle 3) and HSBC health authority biannual report, BC, 2015).



3.2 Coordination and consolidation of school-based healthy living programs

This evaluation in this component area focused on gathering perspectives to indicate the extent to which school-based healthy living programs and resources (e.g., Action Schools! BC, BC School Fruit and Vegetable Nutritional Program, Farm to School, SipSmart) are operating in a more coordinated way, the associated benefits of this coordination, and the continued challenges of operating in a more coordinated, consolidated manner. We present the perspectives of educators and school administrators since they are the users of these programs, and also present the web analytics for the HSBC website (which consolidated the healthy living programs and resources online).

Perceptions of coordination

Educators' and school administrators' perspectives on coordination of school-based healthy living programs are presented in Figure 8 compared to previous years' results. Over the years, there was a slight increase in the proportion of educators and school administrators reporting that the school-based healthy living programs were implemented in a coordinated way (Figure 8).

Evaluation questions: Coordination and consolidation

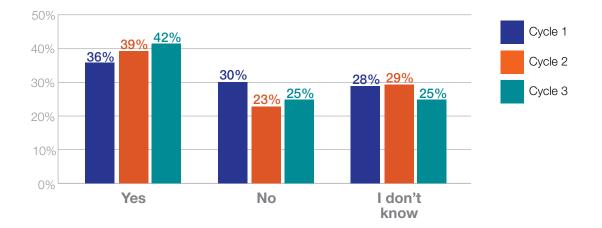


- Do educators and school administrators feel that provincial school-based healthy living programs are coordinated?
- How do educators and school administrators think these programs could be offered in a more coordinated way?

In the open-ended responses regarding improved program coordination, educators and school administrators frequently noted that they were not aware of any school-based healthy living programs beyond the BC School Fruit and Vegetable Nutritional Program. However, similar to responses from cycle 2, educators and school administrators felt that school-based healthy living programs could be better coordinated with:

- Increased awareness and promotion of programs through more information provision to schools;
- Greater linking of the programs to the curriculum;
- More support for teachers to take a lead role in the programs or in their coordination (e.g. release time to coordinate programs, funding);
- More training for volunteers and teachers, with information provided regarding timeframes for programs and how to access program guidance; and
- A coordinator or liaison to work with schools.

Figure 8. Educators' and school administrators' perspectives on whether school-based healthy living programs are being implemented in a coordinated way. (Educators and school administrators survey (cycles 1, 2 and 3), BC, 2013 and 2015).



HSBC website analytics

In each evaluation year, website analytics indicated that the HSBC website was a key tool for connecting the health and education stakeholders to HSBC resources and information, and assisted with consolidation as the "one-stop shop" for school-based healthy living programs. The traffic to the HSBC website increased substantially from 2,799 visits (2014) to 5,008 visits (2015). There was less traffic in February 2016 than February 2015, with the 2016 value falling between what was recorded in 2014 and 2015 (Figure 9). However, the 2015 spike was due to unique visits (3,753), which potentially included a large number of first time visitors, while in 2016 the number of unique visitors was lower (2,989), as we would expect.

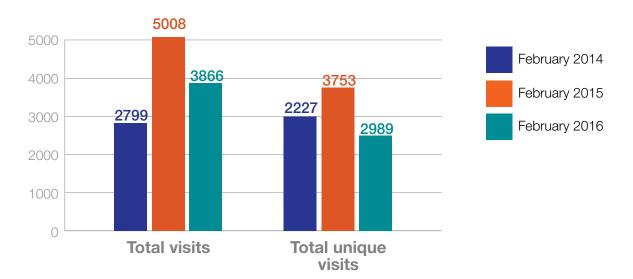


Figure 9. Total website visits for the HSBC website in February 2014, February 2015, and February 2016. (DASH's HSBC website analytics summary, 2014, 2015 and 2016).

Between 2014 and 2015, traffic to all HSBC pages increased by at least 100%, with the greatest increase to the HSBC resources (159 clicks in February 2014 to 2320 clicks in February 2015, a 1359% increase, Figure 10). Between 2015 and 2016, the change in traffic to the HSBC resources levelled off, with only a slight increase (1.5%) (Figure 10). Most notable across time, and indicative of sustained engagement with the HSBC website, was the consistently large increase in clicks on the programs and supports page, with a 131% increase from 2014 to 2015, and a 141% increase from 2015 to 2016 (Figure 10). The HSBC newsletter continued to engage educators over the years, with a steady increase in web views of the newsletter from 2014 to 2016 (Figure 10). Though the HSBC newsletter appears less popular than the pages for HSBC programs and supports, resources, and stories (Figure 10), this is because the network members received the newsletter via direct email delivery, and did not actually need to visit the website to view it.

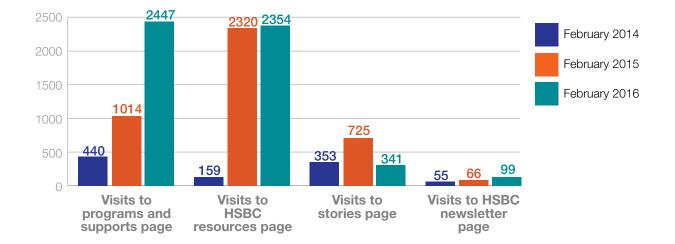


Figure 10. Visits to HSBC website pages for the months of February 2014, February 2015 and February 2016. (DASH's HSBC website analytics summary, 2014, 2015 and 2016).

3.3 Capacity building – knowledge exchange and skill development

The evaluation in this component area examined the use of CSH knowledge exchange and skill development opportunities and tools, and the knowledge, skills and satisfaction of users. Evaluation results in this area focus on awareness and general use of/participation in knowledge exchange and skill development opportunities over the entire course of HSBC, as well as capacity changes resulting directly from delivered learning sessions.

Participation in knowledge exchange and skill development opportunities

Knowledge exchange and skill development opportunities included learning sessions hosted by DASH, the DASH Healthy Schools Leadership Symposium (see Glossary), sessions hosted by the school district or by the health authority, and Healthy Schools Network meetings (see Glossary).

Across all years of the evaluation, health authority staff reported participating in knowledge exchange and skill development opportunities at a low to moderate rate. They reported most frequently participating in DASH-led workshops or learning sessions (47% in cycle 3, Figure 11). The second highest rate of participation was for

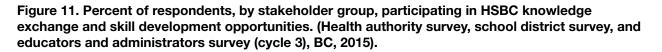
Evaluation questions: Capacity building – knowledge exchange and skill development

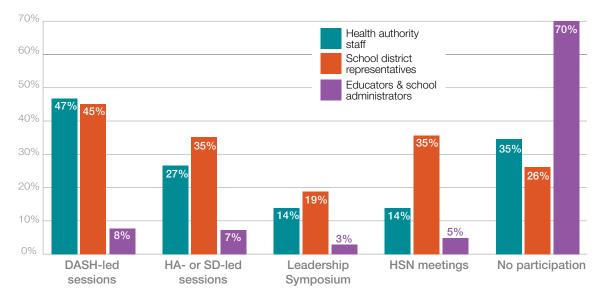
- Do health authority staff, school district representatives, and educators and school administrators participate in Healthy Schools BC knowledge exchange and skill development opportunities?
- How does knowledge of Comprehensive School Health, and ability to work in partnership increase as a result of participation in knowledge exchange and skill development opportunities?

HSBC workshops or sessions that were led by the health authority or school district. There were lower rates of participation for both the Leadership Symposium and the HSN Meetings (14% in cycle 3 for both), as compared to the other opportunities, and this was consistent across years. Interestingly, there was a higher percentage of respondents indicating that they "had not participated in knowledge exchange and skill development opportunities" in cycle 3 (35%), as compared to cycle 2 (19%) and cycle 1 (29%). This may be attributable to staff turnover and to fewer opportunities being offered in cycle 3.

School district representatives most frequently reported participating in DASH-led workshops or learning sessions in cycle 3 (45%) (Figure 11). Reported participation in health authority or school district workshops was higher in cycle 1 and cycle 2, as compared to cycle 3. Participation in the Leadership Symposium and the HSN Meetings was lower than participation in other opportunities across years. Approximately a quarter of the school district representatives reported that they hadn't participated in any of the opportunities in cycle 3, which was higher than in other years.

Across opportunities and years, educators and school administrators generally had a low rate of participation (70% reported not participating in any HSBC learning opportunities in cycle 3, Figure 11), although a more moderate number indicated participating in a session led by the school district (23%) or health authority (13%) in cycle 1. As the opportunities were largely targeted towards building capacity among health professionals, low participation among educators was expected. It is possible that the teachers' job action in 2014 also influenced participation in HSBC opportunities in cycle 2 and cycle 3.





Improved knowledge of comprehensive school health and improved partnering ability

The majority of health authority staff who participated in HSBC knowledge exchange and skill development opportunities indicated that their knowledge of CSH improved (Figure 12), and that their ability to partner with the education sector improved (Figure 13). For health authority staff, the Leadership Symposium was associated with the greatest CSH learning (100% indicated their knowledge of CSH increased), while the HSN meetings were associated with the greatest changes in ability to partner with the education sector (88% indicated that their ability to partner improved). Over the years, more people participating in the various opportunities experienced increased CSH knowledge than increased ability to partner, although most reported changes in both. These results were fairly consistent across the years.

Likewise, the majority of school district representatives who participated in HSBC knowledge exchange and skill development opportunities indicated that their knowledge of CSH improved (Figure 12), and that their ability to partner with the health sector improved (Figure 13). Similar to the health authority staff, school district representatives most frequently reported learning about CSH within the Leadership Symposium (100% indicated their knowledge of CSH increased). School district representatives also most frequently indicated that the Leadership Symposium helped them develop their ability to partner (82% indicated their ability to partner increased). Across opportunities and years, a slightly higher proportion of school district representatives indicated increased knowledge of CSH than increased ability to partner, as a result of their participation in HSBC opportunities.

Similar to the other two groups, the majority of educators and school administrators who participated in HSBC knowledge exchange and skill development opportunities indicated that their knowledge of CSH improved (Figure 12), and that their ability to partner with the health sector improved (Figure 13). Educators and school administrators most frequently reported CSH learning and an increased ability to partner as a result of the DASH-led sessions (98% and 75%, respectively).

Figure 12. Percent of respondents, by stakeholder group, indicating that their knowledge of CSH increased slightly or greatly with participation in various HSBC learning opportunities. (Health authority survey, school district survey, and educators and administrators survey (cycle 3), BC, 2015). Note: HSN meetings included meetings that were both DASH/HSN-initiated or locally-initiated.

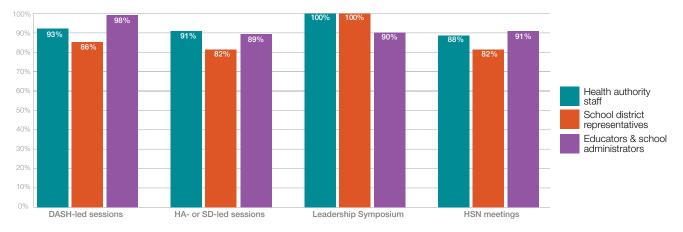
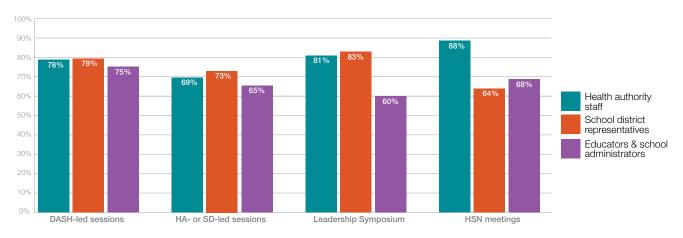
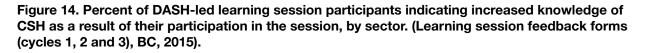
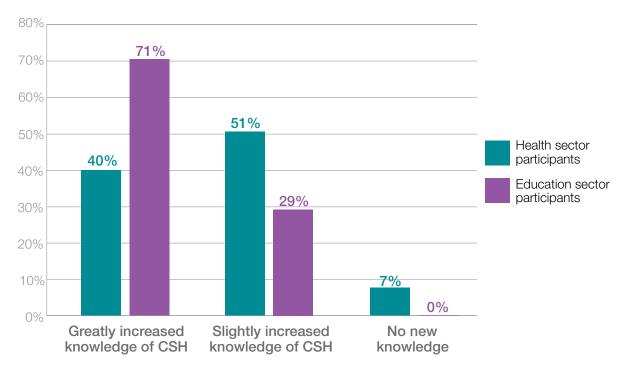


Figure 13. Percent of respondents, by stakeholder group, indicating that their ability to partner between sectors increased slightly or greatly with participation in various HSBC learning opportunities. (Health authority survey, school district survey, and educators and administrators survey (cycle 3), BC, 2015). Note: HSN meetings included meetings that were both DASH/HSN-initiated or locally-initiated.



For the seven DASH-led HSBC learning sessions occurring over the three evaluation cycles and taking place in all five regional health authorities, we used the HSBC learning session feedback forms to ask health authority (N=149 total) and education (N=14 total, cycle 3 only) sector participants four questions: if the sessions increased their knowledge of CSH; if they acquired new skills for implementing a CSH approach; if their ability to partner with health or education improved; and whether their knowledge of their role within a CSH approach increased. The feedback was complementary to what we found within the broader, cycle 3 surveys. Most participants from both health and education reported that their knowledge of CSH increased with participation in a DASH-led HSBC learning session (Figure 14). All of the education sector participants, and a high majority of health participants, indicated that their skills to engage with the other sector increased because of the sessions. Similarly, both groups felt that they were better equipped to teach their peers about CSH (86% for health authority participants, 100% for education participants) and how to engage with partners on the topic (84% for health authority participants, 100% for education participants). The majority of education participants indicated that their role within the CSH approach was absolutely clarified within the session (77%), while health participants were more evenly split between being sure that they had increased knowledge of their role (42%), and reporting that their knowledge of their role was only somewhat increased because of the session (38%).





Further, participants from both sectors in cycle 3 sessions described how their knowledge of CSH changed, and highlighted:

- Increased awareness of grants related to the CSH approach;
- An increased general understanding of CSH;
- Increased understanding of asking questions, and using an inquiry approach;
- Increased understanding of CSH resources available to them;
- Increased understanding of DASH's role in CSH;
- Increased understanding of engagement and why it's important in CSH;
- Greater understanding of the initiative and how stakeholders are connected; and
- Increased understanding of CSH as an approach, not a program.

Overall, the feedback from the three DASH-led learning sessions in the final year of the HSBC evaluation demonstrated that the sessions were pivotal in offering and accomplishing a concrete CSH learning and skills building opportunity.

HSBC initiative in action:

Learning sessions lead to increased engagement between health and education

Increasing the capacity of the health and education sector to use a CSH approach is a core component of Healthy Schools BC. Learning sessions, facilitated by DASH, are just one of the many education opportunities provided to health authorities and school districts through the initiative.

The learning sessions, started in 2012, were offered to increase knowledge and build capacity within health authorities, and have since expanded to become joint sessions that included both health and education partners. Facilitators travelled to different parts of the province to host the day-long sessions. While covering the core information about the concepts of HSBC, available resources, and opportunities for partnership, the sessions were also tailored to suit the needs and circumstances of individual areas. The sessions were exploratory, much like the CSH approach - using questioning to engage and co-explore during decision-making.

Participants learned that there's already much being done across the province, though in many cases it hasn't been recognized or coordinated. A majority of participants said they felt better equipped to engage with other sectors, and to teach their peers how to do the same.

3.4 Capacity building – assessment, planning and implementation tools

We examined awareness of and satisfaction with provincial CSH resources and tools among respondents from health authorities, school districts and schools.

Awareness and use of provincial CSH tools and resources

Health authority staff were the most aware of the HSBC website (81% in cycle 3), followed by the CSH Four Pillar Activity (69% in cycle 3) (Figure 15). More than half of health authority respondents were aware of the Resource Guide for Teaching and Learning, the HSBC Learning Framework, the HSBC newsletter, HSBC assessment tools, and the CSH Resource for Health Professionals. Less than half of respondents were aware of the school district

Evaluation questions: Capacity building – assessment, planning and implementation tools

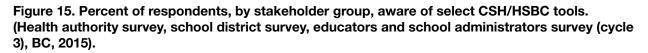
- Are school districts, school staff, and health authorities aware of the provincial CSH/HSBC resources?
- Are school districts, school staff, and health authorities using the provincial CSH/HSBC resources?

health profiles, the Healthy Living Performance Standards, and the BC Community Health Atlas. This level of awareness among health authority respondents was consistent across years. For those who were aware of specific tools, use tended to be high (>70% in cycle 3, Figure 16). The exceptions were the school district health profiles, Healthy Living Performance Standards, HSBC assessment tools, and the BC Community Health Atlas, which had less use. Satisfaction was very high for users (89% - 97% across tools).

The majority of school district representatives were aware of the HSBC website and the HSBC newsletter (74% and 71% in cycle 3 respectively, Figure 15). More than half of school district respondents were aware of the Resource Guide for Teaching and Learning, the HSBC Learning Framework, and the CSH Four Pillar Activity. Less than half of respondents were aware of the School District Health Profiles, the Healthy Living Performance Standards, the HSBC assessment tools, the CSH Knowledge Guide, the CSH Resource for Health Professionals, and the BC Community Health Atlas. Awareness of the various tools did not change to any notable extent across years. Among those school district representatives who reported awareness of the various tools, use of the majority of HSBC tools was moderate (> 50% in cycle 3, Figure 16). Satisfaction was extremely high among those school district representatives who reported using tools (88% - 100% across tools). Use and satisfaction was particularly high for the HSBC website and the HSBC newsletter, as well as the HSBC Learning Framework.

Likewise, educators and school administrators reported most awareness for the HSBC website (40%), followed by the Resource Guide for Teaching and Learning (20%) and the HSBC newsletter (19%) in cycle 3 (Figure 15). Awareness rates were relatively similar across the province. Educators and school administrators had much lower rates of awareness for most tools than health authority staff and school district representatives. Nearly half of the educators and school administrators responding to the survey

were not aware of any of the HSBC tools (49% in cycle 3, consistent with cycle 2). Among those educators and school administrators who reported awareness for specific tools, use of the majority of those HSBC tools was moderate (> 50%, Figure 16). Use and satisfaction levels were high for the HSBC website and the HSBC newsletter, as well as the Healthy Living Performance Standards. For users, satisfaction with the tools was high across tools (92% - 100%). For the HSBC Learning Framework and the CSH Four Pillar Activity, there was noticeably greater use reported in cycle 3 (66% and 72%, respectively) as compared to cycle 1 (48% and 39%, respectively), among educators who were aware of those tools.



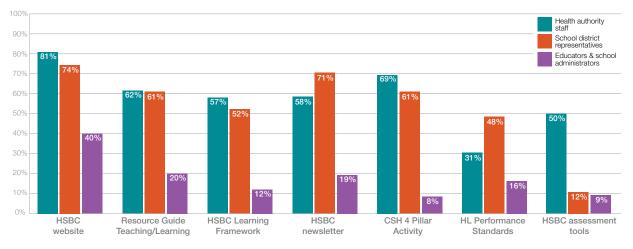
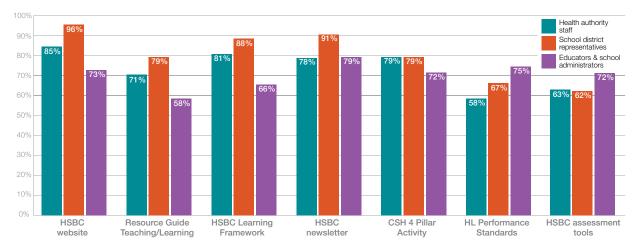


Figure 16. Percent of respondents (who were aware of select CSH/HSBC tools) that reported using the tools, by stakeholder group. (Health authority survey, school district survey, educators and school administrators survey (cycle 3), BC, 2015).



3.5 Student engagement

We present findings related to the extent to which students involved in the healthy living activity and inquiry projects via Healthy Schools Network (HSN) grants (see Glossary for details) were engaged, and the students' perspectives on the impact of their project involvement, as well as teachers' perspectives on student engagement. Further, we show the impact of the Student Healthy Living Network (SHLN) on student participants during the 2014-2015 school year.

Student perspective: Knowledge, engagement, and leadership

In June 2015, 58 students responded to the student survey intended for those involved in HSN inquiry projects at their schools. This included 35 students who also identified as members of the SHLN, and six students who reported belonging to a healthy living club or council at his/her school. Students involved in a HSN inquiry project tended to report that they participated a lot, but did not lead the project (72%), and that they helped pick the project topic or activities (57%). Towards the end of the projects, most students reported that they felt they were "a student with some leadership skills" (67%), rather than "a student leader" (17%), or "a student with limited leadership skills (16%).

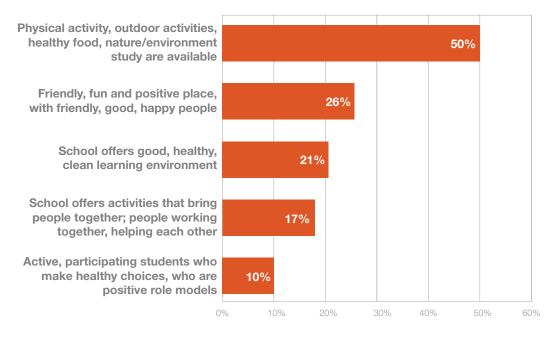
Evaluation questions: Student engagement



- Does students' health literacy and understanding of the school and community impacts on health improve with involvement in inquiry projects or a healthy living student network?
- How does involvement in inquiry projects and a student healthy living network influence students' leadership skills and involvement in their learning?
- What are teachers' perspectives on students' knowledge of the inquiry process and CSH?

Students had varied responses to the question, "In your opinion, what makes a school a healthy place?". The most frequently mentioned themes emerging from the responses are provided in Figure 17. Most often, students indicated that having many opportunities to be physically active, eat healthy foods, and improve the environment made a school a healthy place. Many students also indicated that a fun and friendly place, full of supportive and happy people, was important to a healthy school.

Figure 17. Percent of students reporting key themes on what makes a school a healthy place. (Student survey (cycle 3), BC, 2015). Note: Multiple theme codes applied to single responses, where applicable; therefore responses add up to more than 100%.



HSBC initiative in action:

Mental health inquiry process and summit empowers Okanagan students

The idea for the Youth Mental Health Summit to be held in 2016 in School District 23 (Central Okanagan) emerged from an ongoing process at area schools. Got Health, an initiative led by students, has them using assessment tools to scan their environment and ask questions related to the four Comprehensive School Health pillars. Each participating school has a team of eight students, led by teachers and counselors. It's supported by the district's Health Promoting Schools Coordinators – positions jointly funded by the school district and Interior Health.

Students take into account individual school setting and culture. Sometimes the resulting ideas and actions are implemented through a broader group, and sometimes the entire school adopts them.

When deciding on a focus for the 2015/16 year, mental health seemed an obvious choice. It arose in conversations with students, and teachers wanted to learn how they could consider the kids' social and emotional well-being. And while the process of student-led inquiry has been ongoing within the district, holding a summit is a new experience. Students are reporting the process is helping to reduce stigma around mental health. Making space to talk about it is shifting conversations, and in some cases, the whole culture of the school is being transformed.

Students reported on the impact of the inquiry projects in several domains, and the data suggests that the inquiry projects had a substantial impact on improving health literacy in students, with a lesser impact on greater school connectedness for students (Figure 18). This is illustrated by most students indicating that their participation helped them understand health information (80%), made them more comfortable talking about health issues (55%), increased their understanding of how their decisions and behaviours impact their health (81%), increased their understanding of how their school and community impacted their health (81%), and helped them make healthier choices (72%). Half of the students felt that more students and staff were making healthy choices (50%) and that they were more connected to their school community (53%). Although lesser numbers reported they were more excited to come to school (35%), the majority felt they could positively impact the health of other students and/or staff (64%), and that their health would improve or already improved (71%) as a result of their participation (Figure 18).

Of the 25 students who reported involvement in the SHLN, nearly half (49%) indicated that it helped them develop leadership skills, and two-thirds (66%) indicated that the SHLN gave them the skills they needed to lead an inquiry project. A majority (77%) reported that the SHLN helped them feel that they had greater involvement in their learning.

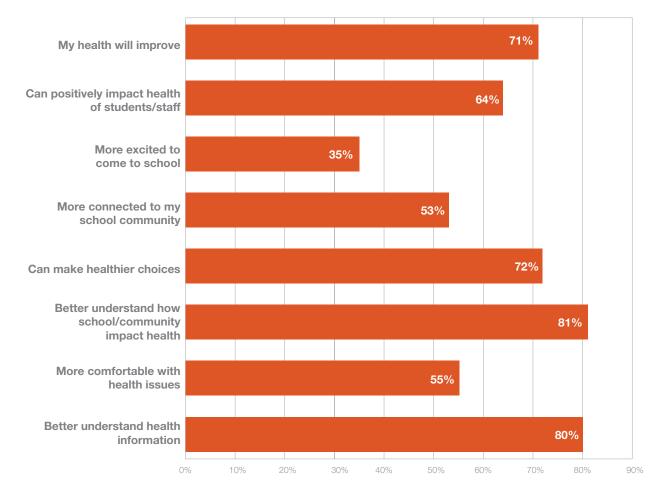
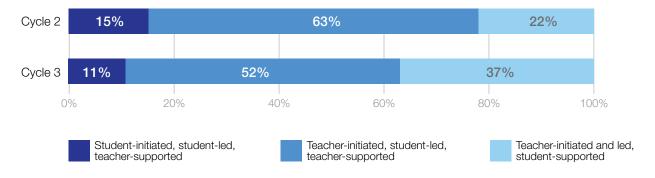


Figure 18. Percent of students agreeing with select statements regarding their participation in an HSN inquiry project. (Student survey (cycle 3), BC, 2015).

Educator support and student understanding of CSH and the "inquiry process" within inquiry projects

In cycle 2, 57 teachers responded to the HSN survey (27 from inquiry projects, 30 from activity projects), and in cycle 3, 146 teachers responded (63 from inquiry projects and 83 from activity projects). The use of the inquiry process was intended to engage students in their learning and in healthy living. We asked educators how their inquiry projects were led (Figure 19). In both cycles, teachers most frequently indicated that their projects were "teacher-initiated, student-led, teacher-supported" (63% in cycle 2 and 52% in cycle 3). In cycle 3, more teachers indicated that projects were teacher-initiated and led, as compared to cycle 2. However, the most common role for students for both cycle 2 and 3 was in leading the projects, with an important role for teachers in initiating the projects.

Figure 19. Educators indications of student and teacher roles in inquiry projects. (HSN teachers survey (cycles 2 and 3), BC, 2014 and 2015).



HSN inquiry project educators described the level of student understanding of the inquiry process that they expected to see by the end of the project. At the time of the surveys, projects were nearly complete. Most commonly in both years, teachers indicated that students would "understand the inquiry process, could formulate inquiry questions, but would require educator support in implementing and completing future projects" (59% in cycle 2, and 67% in cycle 3). Overall, these data suggest that the inquiry project process is a promising process to facilitate understanding of the inquiry projects reported on their students' learning among students. Further, educators involved with the activity projects reported on their students' learning of CSH. It appears that the HSN activity projects in cycle 3 provided a reasonable vehicle for learning about CSH, with 35% of the project teachers indicating that their students learned a great deal about CSH. This learning appeared to be increased from cycle 2 (Figure 20).

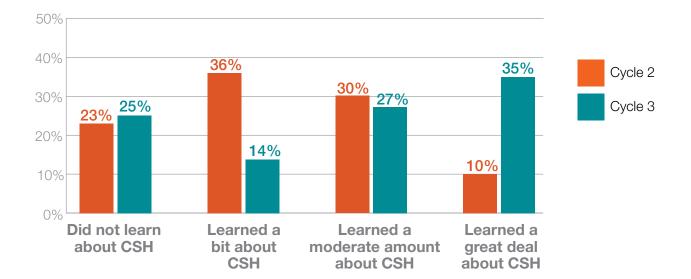


Figure 20. Educators' reported level of CSH learning by students in HSN activity projects. (HSN teachers survey (cycles 2 and 3), BC, 2014 and 2015).

3.6 Healthy Schools BC outcomes

In our consideration of the HSBC outcomes, we focused on outcomes related to the implementation of the CSH approach with health authority staff, school district representatives, and educators and school administrators, on observations of changes in the school environment by educators and school administrators, and on indications of changes in student health outcomes over time from provincial surveys.

HSBC and implementation of the CSH approach

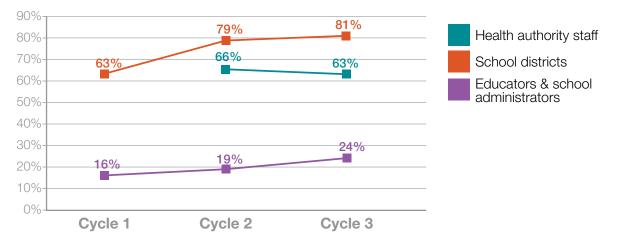
Across evaluation groups, school district representatives had the highest frequency of reporting that they were knowledgeable about CSH and applied it in their work (Figure 21), and this percentage was higher in each successive evaluation year (63% in cycle 1 to 81% in cycle 3). Among health authority staff, 63 to 66% indicated that they were knowledgeable about CSH and applied it in their work, depending on the year. Across health authorities, the proportion of staff who reported that they were knowledgeable about CSH and applied it to their work varied greatly (30% to 91% in cycle 3). This speaks to the variability in approaches and stages of implementation with respect to HSBC across health authorities. Although a minority of educators and school administrators were knowledgeable about CSH and applied it in their work, this percentage increased from 16% in cycle 1 to 24% in cycle 3. There was also

Evaluation questions: Healthy Schools BC outcomes

- What is the level of awareness and implementation of the Comprehensive School Health framework?
- What are the observed changes at schools over the last year as a result of Healthy Schools BC activities?
- What CSH areas (relationships and environments, teaching and learning, community partnerships, and school policies) have schools become stronger in?
- What changes have occurred in provincial student health outcomes over the life of the HSBC initiative?

a substantial decline in the percent of educators and school administrators reporting that they had never heard of the term "comprehensive school health," from 46% in cycle 1 to 29% in cycle 3.

Figure 21. Percent of respondents, by stakeholder group, who indicated that they were knowledgeable about comprehensive school health and applied it in their work. (Health authority survey, school district survey, and educators and administrators survey (cycles 1, 2 and 3), BC, 2013 and 2015).



Note: Question not asked to health authority staff in cycle 1.

HSBC initiative in action:

Vancouver Coastal Health puts comprehensive school health into practice

While Vancouver Coastal Health (VCH) is involved with a number of the healthy school committees in the region and contributes to the overall direction taken by districts, the VCH healthy schools project team also wanted to help public health nurses implement the CSH approach on the ground.

In early 2016, the project team released *VCH Healthy Schools Public Health Nursing Standards*, which outline how the nurses can use school, student and population health data, the CSH approach, and evidence-informed practice in health planning, promotion and wellness activities. The goal was to not add to the workload beyond current staffing and activity levels – but rather to apply best-practice to existing work.

The team also developed a core competency document, *Health Promotion in Schools Using the CSH Approach,* to help health authority staff understand the scope of knowledge and skills that can be used in their work.

The team chose first to develop practice standards for public health nurses because they have regular contact with school administrators and make up the majority of health professionals working with schools. Health promotion was already being done in schools and was expected to be part of the job; this became an opportunity to define it. VCH will also use the model as a template in developing standards for other public health staff working with schools.

As an indication of CSH implementation, we also examined the percent of school district representatives who indicated that their school district had developed a healthy schools action plan, goal, policy or committee with a focus on the CSH approach. Though less than half of school districts reported that they had developed a healthy schools plan (23%), policy (32%), goal (48%), or committee (42%), the majority that had developed one of these healthy schools pieces reported doing so with a focus on the CSH approach (53-77%, depending on piece developed).

Educators and school administrators indicated the ways that their schools became stronger in implementation of the CSH approach over the last year (Figure 22). In cycle 2 and cycle 3, it was most common for educators and school administrators to indicate that they became stronger in building healthy relationships between students and staff, which falls under the 'Relationships and Environments' pillar of the CSH approach (43% in cycle 2 and 44% in cycle 3). Results for the other components of the healthy schools (CSH) approach (teaching and learning, school policies and community partnerships) were similar to each other and similar across years (in the range of 30% to 37%). These results were generally similar across health authorities. In both years, 28% of educators and school administrators indicated that their school had not become stronger in implementation of the CSH approach.

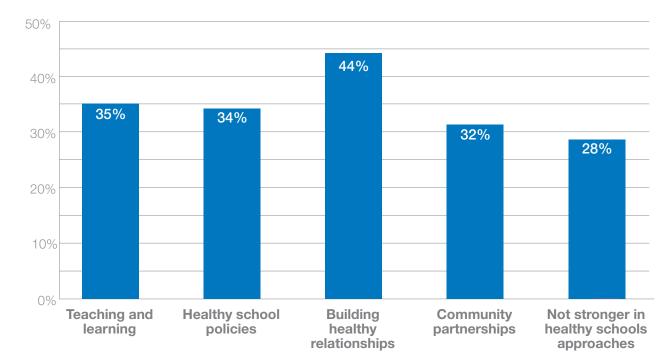


Figure 22. Percent of educators and school administrators reporting that their schools became stronger in their healthy schools approaches (implementation of CSH approach) over the last year (Educators and school administrators survey (cycle 3), BC, 2015).

HSBC outcomes: Changes to school environment

In each evaluation cycle, half of the educators and school administrators reported "some, slight or great" changes in their school environment in the last year, as a result of HSBC activities (51% total in cycle 3, Figure 23). It was uncommon for educators and school administrators to report that there was a negative change (1% in cycle 3). There was little difference in the reports of these observed changes over the years. There was a higher percentage of educators and school administrators within Interior Health (63%) and Northern Health (67%) who indicated that they observed positive changes to the school environment in cycle 3 due to HSBC activities, as compared to the provincial average.

Educators and school administrators provided examples of the changes they had observed to their school environment. Similar to previous years', it was common for educators and school administrators to describe changes that related to healthy eating, physical activity, mental health, and healthy relationships (see sidebar). Educators' observations of changes to the healthy schools environment:

"We have been working toward becoming a healthy school for the last 15ish years. During that time we have gone from pop machines to water/juice. School lunches have greatly improved in quality ... More teachers are teaching various aspects of nutrition. Promoting physical activity is a focus. Making connections between protecting the land, clean water, growing good food, healthy diets and eating habits." —Teacher, SD 20, Interior Health Authority

"More students eating fruits and vegetables; more students playing sports during afterschool programs and on their own initiative at recess times; community professionals working in the school with staff, students, and families." —Teacher, SD 57, Northern Health Authority

"We have significantly increased awareness about mental health, and the need to keep the body moving in order to improve learning in the classroom." —Principal, SD 41, Fraser Health Authority

"Last year we implemented a school wide buddy system (K-12) to develop and foster stronger bonds between older and younger students. This was such a success, we have continued this program and are again experiencing higher levels of communication and compassion and deeper friendships within our school environment."

-Teacher, SD 67, Interior Health Authority

"Healthy choices in the cafeteria, fruit/veggie program.
Supportive places for students to be when they need to chat or have a quiet space, yoga for students managing stress, depression, anxiety."
Counsellor, SD 57, Northern Health Authority

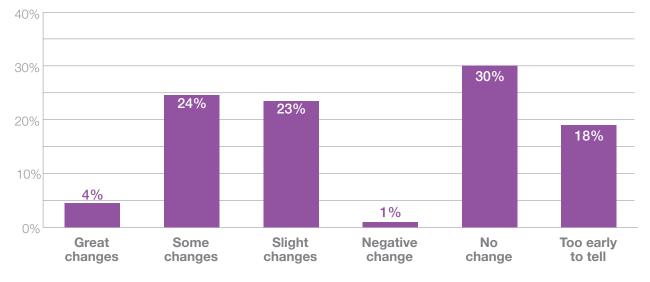


Figure 23. Educators and school administrators' indications of the changes they observed to their school environment as a result of Healthy Schools BC activities in the last year. (Educators and school administrators survey (cycle 3), BC, 2015).

Provincial student healthy living outcomes

The Ministry of Education administers the Satisfaction Survey each year between January and April to students in grades 3, 4, 7, 10 and 12. The survey is a valid and reliable province-wide census of target respondents and aims to provide a representative picture of the education experience in British Columbia. Within the survey, there are several indicators related to healthy schools, and tracking changes in these indicators is relevant to the evaluation of HSBC. However, it is recognized that the concentration of action within HSBC between 2011 and 2015 was directed toward establishing cross-sector partnerships and building capacity so that health authority staff, school district staff, and educators and school administrators could be effective in implementing the CSH approach. Over this time, regional health authorities primarily worked with education partners within three of the four pillars of the CSH framework – (1) strengthening partnerships and connections to health services, (2) creating healthy physical and social environments in schools, and (3) developing healthy school policies. The opportunities to work within the fourth pillar – teaching and learning, which would have a more direct impact on student health outcomes – were limited. For both educators and health authority staff, the capacity to work on teaching and learning was limited due to competing priorities (e.g., school-based immunizations and screening services), and provincial labour action by BC public school teachers during the 2014/15 school year.

As such, it was not an expectation of HSBC to show discernible impacts on student-level outcomes in its first few years. Further, the long term (10 year) target for learning to stay healthy in school was set in 2013 in the B.C. Guiding Framework for Public Health - two years after the start of the initiative. These data are presented here to paint a picture of current student health status while HSBC was becoming established, and to provide a baseline from which to monitor changes in student health over the next several years when the longer term impact of HSBC is expected to be achieved.

Learning to stay healthy in school

Between 2010/2011 and 2014/2015, there was a gradual decrease observed for BC students of all grade levels in terms of the percentage of students reporting that they are learning about how to stay healthy in school. It is desirable to reverse the ongoing downward trend of these measures in all grades over time towards achieving the targeted level (90%) by 2023. Students in younger grades consistently reported a higher rate of learning about how to stay healthy in school than those in higher grades, with approximately a 10% drop between each successive increase from Grade 3/4, Grade 7, Grade 10, to Grade 12 (Figure 24). In 2014/2015, nearly two thirds of BC Grade 3/4 students reported that they were learning to stay healthy in school. This proportion dropped with increased grade level to less than one in three Grade 12 students. Within each grade level, the percent of students reporting that they were learning to stay healthy in school was similar across the health authorities.

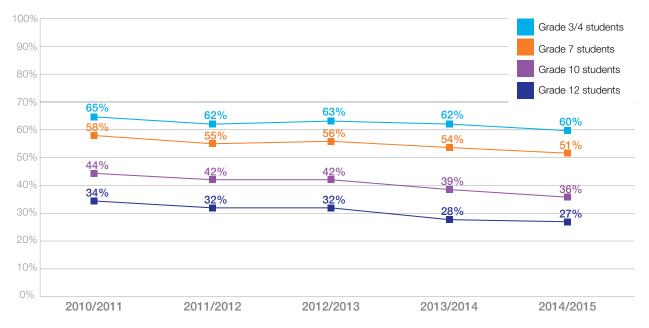
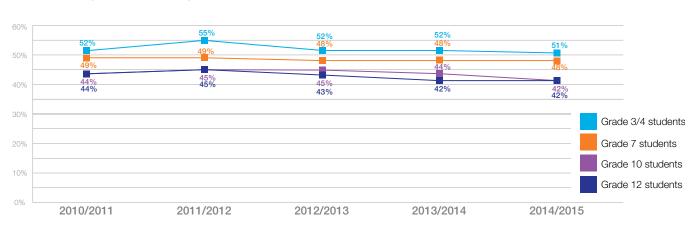


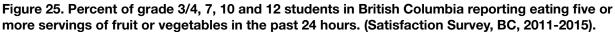
Figure 24. Percent of grade 3/4, 7, 10 and 12 students in British Columbia reporting that they were learning to stay healthy at school. (Satisfaction Survey, BC, 2011-2015).

Moving forward, the redesigned K-12 education curriculum includes a new Physical and Health Education subject area, which is expected to be fully implemented by the 2017/2018 school year. The ministries of Health and Education are currently working with the regional health authorities to enhance resources and regional health-education partnerships that will support teachers in effectively delivering this new curriculum. This presents a significant opportunity to contribute to improvements in student health indicators, and especially the "learning to stay healthy" indicator, across the province.

Healthy eating

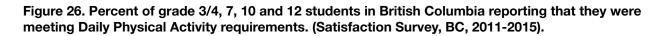
This indicator assessed consumption of five or more servings of fruit and vegetables in the previous 24 hours. Between 2010/2011 and 2014/2015, fruit and vegetable consumption among BC students stayed relatively stable in each grade (Figure 25). The 2023 target for British Columbians over 12 years of age is 55%. There was a gradual decrease between 2011/2012 and 2014/2015 for Grades 10 and 12. Students in younger grades consistently reported a higher rate of eating healthy. In 2014/2015, just over half of BC Grade 3/4 students reported eating healthy (51%).

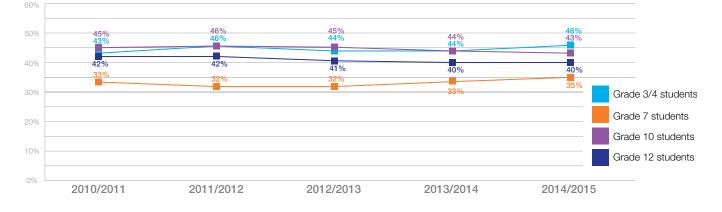




Physical activity

This indicator assessed whether students met Daily Physical Activity (DPA) requirements of 30 minutes physical activity at school each day for grades K-7, or 150 minutes physical activity per week for grades 8 and up. Between 2010/2011 and 2014/2015, adherence to DPA requirements among BC students improved slightly for those in younger grades (Grades 3/4 and 7) and dropped slightly for those in higher grades (Grades 10 and 12) (Figure 26). Grade 3/4 and Grade 10 students consistently reported higher rates of meeting DPA requirements, while grade 7 reported the lowest. In 2014/2015, less than half of all BC students met the DPA requirements in all grade levels.

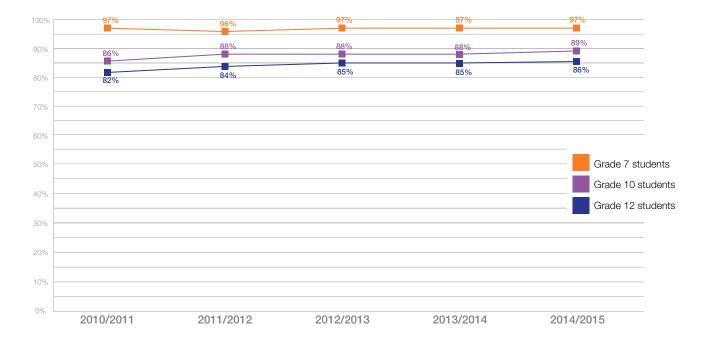




Smoking

Between 2010/2011 and 2014/2015, the percentage of students who did not smoke cigarettes remained relatively consistent for Grade 7 students and increased slightly for Grade 10 and Grade 12 students (Figure 27). Students in younger grades consistently reported a higher rate of non-smoking compared to those in higher grades. In 2014/2015, the majority of BC students did not smoke cigarettes.

Figure 27. Percent of grade 7, 10 and 12 students in British Columbia reporting that they did not smoke cigarettes. (Satisfaction Survey, BC, 2011-2015).



School connectedness

The McCreary Centre Society's Adolescent Health Survey reports on school connectedness, constructed from questions related to what extent youth felt part of their school and that they were cared about at school, and how youth got along with others at their school. Given the relationship observed between school connectedness and health in this survey – e.g., 94% of youth who had high school connectedness indicated good or excellent mental health – school connectedness is an additional indicator to follow in long term monitoring of HSBC. In 2013, school connectedness was greatest among students in Grade 7 as compared to higher grades; 40% of Grade 7 students had the highest levels of school connectedness, compared to 16% of Grade 10 students and 21% of Grade 12 students.

4. Synthesis and future considerations

Healthy Schools BC is a major initiative under Healthy Families BC umbrella, and sits within Goal Area 1 (Healthy Living and Healthy Communities) within BC's Guiding Framework for Public Health. HSBC was designed to strengthen health-education partnerships and enhance the capacity of both sectors to effectively implement healthy schools initiatives using a comprehensive school health (CSH) approach. As such, this evaluation, initiated two years after the launch of HSBC, was appropriately focused primarily on the partnership process and the progress towards it, with attention towards the CSH capacity built over the years.

Strengthening the partnership between health and education is necessary to achieve HSBC goals and long term targets in learning to stay healthy in school, physical activity and school connectedness, among others. During each data collection, we were focused on key questions within each HSBC component area (cross-sector partnerships, coordination and consolidation, capacity building, student engagement, and HSBC outcomes), and reported on these component areas consistently. Brief summaries of key findings are provided with future considerations in each HSBC component area under the next several headings.

4.1 Cross-sector partnerships

Building and strengthening partnerships between health and education has been a central focus of HSBC since its inception. Most health authority staff who responded to the HSBC evaluation surveys provided supports to school districts and schools, including tools and resources, links to community partners or services, and assistance with their healthy schools activities. Other supports, including workshops, the provision of health data and the actual hands-on support of helping with healthy schools assessment, planning or evaluation, were provided less often. Health authority staff consistently reported that they had the knowledge, skills and tools to provide support to the education sector. However, very few indicated that they had the time within their current roles to support the implementation of a CSH approach. Despite this, there tended to be an increase in the support provided over the evaluation years. And further, many educators indicated that support from health authority staff made them stronger in assessing existing healthy schools activities and opportunities, as well as planning, implementing and evaluating healthy schools initiatives. School district representatives had greater awareness of the health authority supports for CSH, as compared to educators. With the low awareness of the support that health authorities could provide directly to schools through assisting with assessments, planning and evaluation, there is an opportunity to increase the education sector's awareness of the availability of this hands-on support, where it exists in specific health authorities. Over time, an increasing percentage of health authority staff indicated that their partnership with school districts and schools had strengthened in the past year. However, it was school district representatives who were most likely to indicate that partnerships had strengthened, though they were unlikely to report that they frequently worked towards shared goals with the health authority. Schools tended to be unsure about whether the partnership with their health authority had strengthened.

Future considerations

- Strengthen and align strategies to increase school districts' and schools' awareness of the support that health authorities, the Ministry of Health, DASH and other NGOs can provide to implement a CSH approach.
- Explore strategies to increase the collective healthy schools capacity of partners and sectors within and beyond health and education (e.g., private sector, other NGOs, post-secondary education, local community partners).
- Increase the opportunities to define and work together towards healthy schools goals for school districts and health authority staff.
- First Nations health and education partners had little involvement in HSBC to date. Initial engagement should be expanded to identify opportunities to strengthen relationships, and align HSBC activities with traditional understandings to support education and wellness in First Nations students.

4.2 Coordination and consolidation

Activities within this HSBC component did not advance as quickly or as completely as intended. There was little awareness at the school level of provincial healthy living programs, and further, which programs could be coordinated or consolidated. Consistently over the years, less than half of the educators surveyed felt that the school-based healthy living programs were coordinated. Educators suggested that school-based healthy living programs could be better coordinated with increased awareness and promotion of programs, greater linking of the programs to the curriculum, more support for teachers to take a lead role in coordinating programs, more training for volunteers and teachers, and a coordinator to work with schools.

Future considerations

Consider the advantages of an umbrella approach for coordinating and consolidating the school-based healthy living programs: to increase awareness of and access to the programs, share resources, improve implementation of the CSH approach, and deliver a greater impact on student health.

4.3 Capacity building

Within HSBC, there were two main avenues for capacity building across the health and education sectors: (1) CSH knowledge exchange and skill development opportunities, which included workshops/ learning sessions hosted by DASH or by the health authority or school district, the DASH Healthy Schools Leadership Symposium, and Healthy Schools network meetings; and (2) a suite of tools and resources developed to help both sectors learn about and apply a CSH approach.

Over the years and as planned, knowledge exchange and skill development opportunities were used more by health authority staff and school districts than by educators in schools. For both health authority staff and school district representatives, the most frequent participation was in DASH-led workshops. For those that participated in these opportunities, the increases in CSH knowledge and ability to partner across sectors was substantial. In all years and opportunities, over 80% of every stakeholder group reported that their CSH knowledge increased because they participated. Of the capacity-building tools and resources, the HSBC website had the highest rate of awareness for all stakeholder groups. After the HSBC website, there was a mix of the most popular tools for each stakeholder group, with generally greater awareness of the Resource Guide for Teaching and Learning across groups.

Future considerations

- Continue to provide HSBC knowledge exchange and skill development opportunities with appropriate linkages (e.g., to the redesigned Physical and Health Education curriculum) for all stakeholder groups. Do widespread promotion of these opportunities to key target groups, including stakeholders who haven't previously been involved.
- Increase the reach of DASH-led HSBC Learning Sessions to educators and school administrators in particular, as this learning opportunity demonstrated a great impact on increasing CSH knowledge in this stakeholder group.
- Explore mechanisms to promote the HSBC website to reach a wider audience of educators, school administrators, and community partners, while improving the website to ensure that it is dynamic, user-friendly, and responsive to user needs.
- Support and increase the use of existing tools (e.g., for assessing, planning, facilitating and monitoring of healthy school activities) within individual schools and school districts, in alignment with their healthy schools goals.
- Review the HSBC capacity-building tools and resources that stakeholders were consistently least aware of (e.g., HSBC Assessment Tools, CSH Knowledge Guide, BC Community Health Atlas), and:
 - Increase promotion of the resources to increase uptake, if the tools are still needed;
 - Update content so that they are more relevant to the current interests, the new curriculum, and needs within HSBC; or
 - Retire them and create new resources that better meet the current needs and interests within HSBC.

4.4 Student engagement

Students engaged through HSBC activities, namely through Healthy Schools Network (HSN) inquiry projects and the Student Healthy Living Network, learned about CSH and the inquiry process. Student participation in the inquiry projects helped them understand health information, and how their decisions, behaviours, school and community environments impact their health. Involvement in the Student Healthy Living Network, in combination with participation in an inquiry project, helped students feel that they had greater involvement in their learning. In both years, HSN teachers most frequently indicated that while they initiated and supported inquiry projects, their students took the lead in the projects.

Future Considerations

- Explore mechanisms that connect students more firmly to an existing infrastructure of adult/educator champions at the local/regional level (e.g., the Healthy Schools Network), so that students can benefit from more opportunities for collaboration and broader perspectives.
- Engage students more meaningfully in the healthy schools process (i.e., assess, plan, act, and evaluate healthy school initiatives), including leadership and other opportunities that meet students' needs and interests, within and beyond healthy living inquiry projects.

4.5 Healthy Schools BC outcomes

HSBC was effective in advancing the implementation of the healthy schools approach, demonstrated through increased understanding and application of CSH. Over the years, the percent of both school district representatives and educators and administrators who were knowledgeable about CSH and applying it in their work increased. Further, the education sector's ability to take action within the four CSH pillars was strengthened. Nearly half of the educators surveyed reported that, in the last year, they became stronger in building healthy relationships, while approximately a third believed that their school had strengthened in the other three pillars – teaching and learning, policies and initiatives, community partnerships - within the last year. In each year of the evaluation, half of the educators surveyed attributed observed changes in their healthy school environment to HSBC activities. The focus of the HSBC work since 2011 has been largely on building the foundation for the eventual positive changes to student health to occur. Building the capacity of school communities to implement a CSH approach - promoting health through teaching and learning, school policies, relationships and environments, community partnerships – takes many years. Once this systematic change in practice has occurred, we should expect to see changes to student health outcomes.

Future considerations

- Long term and stable funding and commitment towards supporting HSBC objectives, particularly in the areas of cross-sector partnerships and capacity-building, is required to continue on a path towards widespread implementation of the CSH approach and a positive impact on student health outcomes.
- Plan for a medium-term (2 years) check-in on a small set of HSBC indicators (e.g., partnership progress and strength, CSH knowledge and application, participation in learning opportunities, depth of student engagement, observed changes to the school environment), and a longer term (5 years) check-in on student health and educational outcomes to monitor the impact and progression of continuing work.

4.6 Conclusions

Overall, the evaluation of HSBC demonstrated progress towards strengthening the relationships across the health and education sectors and building capacity to support the CSH approach. As a result of partnering efforts led by health authority staff, knowledge translation and skill development opportunities largely led by DASH, and the multitude of resources and tools contributed by DASH, PHSA and the Ministry of Health, there was a positive shift in knowledge of CSH and in ability to partner across sectors. However, an increase in the time available for health authority staff to participate in healthy schools activities would translate to a deeper engagement with the education sector and stronger partnerships. Revisiting healthy schools goals jointly with health authority and school district participation will increase the likelihood of enacting a plan to work towards them together.

Further action in coordination and consolidation of school-based healthy living programs is warranted to fully benefit students. Students were engaged in healthy living through diverse projects and HSBC-related councils and groups at their schools; deeper and broader engagement of students should be a long term focus of continued healthy schools efforts. How changes in CSH capacity for all stakeholders relate to student health outcomes should be an emphasis of longer term evaluation efforts, as HSBC has laid an important part of the foundation for improvements in student health in BC.

Moving forward, the redesigned K-12 education curriculum includes a new Physical and Health Education subject area, which is expected to be fully implemented in the 2017/18 school year. Several BC ministries, including Health and Education, are currently working with the regional health authorities, NGOs and other education partners to enhance resources and regional cross-sector partnerships that will support teachers in effectively delivering this new curriculum. This presents a significant opportunity to contribute to improvements in student health indicators, and especially the "learning to stay healthy" indicator measured across the province.