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A Process Evaluation of the Sip Smart! BC Teacher Resource

Submitted to:

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Heart and Stroke Foundation of BC & Yukon**

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Executive Summary

Sip Smart! BC is an initiative of the British Columbia Pediatric Society and the Heart and Stroke Foundation of BC & Yukon (HSFBCY). The program is designed to inform children and their parents about proper beverage choices with the goal of decreasing children's intake of sugary drinks. The literature suggests that the consumption of sugary drinks is associated with weight gain and obesity. As such, decreasing children's consumption of beverages high in sugar supports public health strategies and encourages healthy lifestyles.

Sip Smart! is a classroom-based learning module, delivered by teachers that educate students in Grades 4 through 6 and their families about healthy beverage choices. A pilot project of the original Sip Smart! program was implemented in more than 200 Grades 4 to 6 classrooms across BC in the 2008–2009 school year. An evaluation of the pilot project involved 520 Grade 4 students in 20 classrooms that received Sip Smart! and 493 Grade 4 students in 20 comparison classrooms found promising results — the pilot program increased students' awareness and knowledge of healthy beverages. The current Sip Smart! program was revised and formatted for sustainability to be delivered by teachers and its content was divided into five lessons. The revised program became the Sip Smart! BC Teacher Resource. The program was integrated into the HSFBCY's HeartSmart Kids™ program and Action Schools! BC. Currently, over 1000 print and online resources have been distributed to teachers across the province, and enough resources are available for 50 per cent of teachers of Grades 4 through 6 (approximately 2,250 teachers).

The Social Research and Demonstration Corporation (SRDC) was commissioned by the BC Pediatric Society and the HSFBCY to conduct a process evaluation of the Sip Smart! BC Teacher Resource. The aim of the evaluation was to gain a clear understanding of how the Teacher Resource were implemented, delivered, and promoted to teachers in BC schools. The delivery of the program had changed from the initial pilot and the funders want to ensure the program was implemented appropriately in order to achieve the desired outcomes. Data was collected from May to June 2010 from the Sip Smart! BC Project Manager, Action Schools! BC, Community Nutritionists, Teachers and 198 Grade 5 and 6 students. The evaluation indicates that the promotion, distribution and use of the resource is going well. At the start of the 2009–2010 school year the distribution of the resources were still being fine tuned. These have since been addressed and plans for distribution are now in place for the upcoming 2010–2011 school year.

Similar to the earlier evaluation results, teachers liked the Sip Smart! BC Teacher Resource and found it to be user friendly, feeling that it contained materials and lesson guides that were ready to use and involved little advanced preparation. Teachers also preferred to use the hard copy materials, and showed less interest in using the online resources and activities. Grade 5 and 6 students who participated in one of eight focus groups recalled many of the messages of the Sip Smart! program and responded favourably to the activities in which they were engaged. The consumption of sugary drinks that students reported in the focus groups is consistent with findings from the evaluation of the Sip Smart! pilot project. Follow-ups with teachers who received the Teacher Resource to remind them to use the resources would be key and necessary to ensuring delivery of all the lessons in the classrooms, as only 44 per cent of

teachers who responded to an online survey indicated that they had delivered all five lessons in the 2009–2010 school year.

1. Introduction

Sip Smart! BC is an initiative of the British Columbia (BC) Pediatric Society and the Heart and Stroke Foundation of BC & Yukon (HSFBCY) with funding provided by ActNow BC. Sip Smart! BC works in partnership with HSFBCY and Action Schools! BC to disseminate the Sip Smart! BC Teacher Resource to teachers across the province. Sip Smart! was designed to inform children and their parents about proper beverage choices with the goal of decreasing children's intake of sugar-sweetened beverages (hereafter referred to as "sugary drinks"). The literature suggests that greater consumption of sugary drinks, particularly carbonated soft drinks with their high sugar content, is associated with weight gain and obesity (Malik, Schilze & Hu, 2006). Therefore, the aim to decrease consumption of sugary drinks supports public health strategies as part of a healthy lifestyle and a step towards achieving healthy weights.

1.1 Report Structure

This report presents the findings from a process evaluation of the Sip Smart! BC Teacher Resource that was distributed in the 2009–2010 school year. Section 2 reviews the background of the Sip Smart! BC program. Section 3 provides a brief summary of the evaluation of the Sugar-Sweetened Beverage School Education Initiative's pilot program delivered in the 2008-2009 school year, an initiative of the British Columbia Healthy Living Alliance (BCHLA). Section 4 describes the sustainability plan for the Sip Smart! BC Teacher Resource, including changes from the pilot program and how resources are promoted and distributed. Section 5 provides an overview of the evaluation design for the process evaluation of the sustainability plan for the Teacher Resource. Section 6 reports the findings from the process evaluation including its implementation, and the perspectives of those who promote and distribute the resources, the users of the resources, and students. The final section contains a summary of the findings, lessons learned and recommendations.

2. Background

2.1 Sip Smart! BC

Sip Smart! is an interactive classroom-based learning module that was part of the BCHLA's Sugar-Sweetened Beverage School Education Initiative and was co-led by the BC Pediatric Society and the HSFBCY. The Initiative focused efforts to help British Columbians to make healthy food and beverage choices. The Sip Smart! learning module aimed to provide teachers, parents and students of Grades 4 to 6 with relevant information about sugary drinks and healthy drink choices. The original Sip Smart! module was led by an external facilitator and consisted of three one-hour lessons. A pilot project of the original Sip Smart! program was implemented in more than 200 Grade 4 to 6 classrooms across BC in the 2008–2009 school year. The pilot project participated in an evaluation, as further discussed in Section 3, and the program was later revised into the Sip Smart! BC Teacher Resource. The current Sip Smart! program was revised and formatted for sustainability and to be delivered by teachers and its content was divided into five lessons. The program was integrated into the HSFBCY's HeartSmart Kids™¹ program and Action Schools! BC² Resource Boxes. Teachers can access the Resource in hard copy from the HSFBCY and Action Schools! BC, or download it online from the BC Pediatric Society (<http://www.bcpeds.ca/sipsmart/order>). The Sip Smart! BC Teacher Resource is a binder that includes all the information needed for a teacher to deliver the five lessons addressing sugary drinks. Class sets of 30 booklets for families are also provided to teachers to help link the lessons and messages learned in the classroom to the home environment.

2.2 Overview of the Revised Sip Smart! Program and its Components

Sip Smart! BC was designed to meet learning outcomes for the Health and Career Education curriculum for Grades 4, 5 and 6 in BC and was prepared in an easy and ready-to-use format for teachers to deliver in their classroom. Sip Smart! BC delivers nine key messages to students. The following messages were incorporated in the lessons that form the Teacher Resource:

- Water is a great drink choice.
- Sugar is a major ingredient in many popular drinks.
- Knowing what is in drinks helps individuals make healthy beverage choices.
- The number and size of drink servings affect the amount of sugar consumed.

¹ HeartSmart Kids™ is a curriculum-based program for Kindergarten to Grade 6 that encourages children to make heart-healthy choices. The program is supported by the HSFBCY and it delivers the Teacher Resource to teachers across the province to incorporate into their classrooms. More information about HeartSmart Kids™ can be found at http://www.heartandstroke.bc.ca/site/c.kplPKXOyFmG/b.3757691/k.B96F/HeartSmart_Kids8482.htm

² Action Schools! BC assists elementary schools to address physical activity and healthy living based on best practices. It provides resources to schools and advice on how to create individualized action plans for their school. More information about Action Schools! BC can be found at www.actionschoolsbc.ca.

- Some drinks are not included in *Eating Well with Canada's Food Guide*.
- Drinking sugary drinks “bumps out” nutritious drinks and foods.
- Some ingredients in sugary drinks other than sugar, such as acid, may not be good for your health.
- Drink choices can be influenced by various factors including family, friends, and the media.
- We can decide for ourselves to make healthy drink choices.

2.2.1 Lessons and Activities

The Sip Smart! BC Teacher Resource consists of five lessons for teachers to deliver to students in Grades 4 through 6. The lessons include:

- **Lesson 1: Drink Detective.** This lesson aims to engage students in learning about sugary drinks and what drinks are healthy choices.
- **Lesson 2: Sugar, Sugar!** This lesson educates students about the lack of nutritional value in sugary drinks and how they do not fit into the four food groups in *Eating Well with Canada's Food Guide*
- **Lesson 3: Not Just Sugar.** Students continue to keep track of what drinks they consume and the amount of sugar they consume from them.
- **Lesson 4: Sip Smart!** This lesson helps students compare what they drank at the start of the program to now and that the size of the drink affects the amount of sugar they consume.
- **Lesson 5: Think Before You Drink!** The fifth lesson engages students to discuss how other factors influence their choice of beverage, such as the media, friends and family.

While each lesson can be delivered independent of the others, the program is designed with the intention of teachers delivering all five lessons. Each lesson is expected to take 30 to 40 minutes to deliver, and includes recommended activities for teachers to carry out with students. If time is limited, the activities are also designed as standalone activities and can be delivered independent from the lessons, allowing the teacher to have more flexibility. As well, because Sip Smart! was developed for Grades 4 to 6, each lesson divides content into two levels, Level 1 for Grades 4 and 5 students, and Level 2 recommended for Grade 6 or advanced Grade 5 students. This allows teachers to tailor the content of the lessons depending on the grade(s) they teach, as well as new content and exercises for students who receive the program a second time in Grade 5 or 6.

2.2.2 Resources

In addition to the lesson plans and supporting activities, the Teacher Resource also includes:

- An overview of the Sip Smart! BC Program.
- Backgrounder documents providing teachers with additional and supplemental information for the lessons.
- A resources section that includes copies of handouts and overheads.
- Assessment tools for the four main activities.

- Ideas for extension activities for teachers to deliver to reinforce messages about sugary drinks.
- A list of online Sip Smart! BC resources, which include a Drinks Diary Calculator³, video clips, information about downloading the complete Sip Smart! BC Teacher Resource binder, information on how to order additional materials, and links to other organizations for teachers to access additional information about healthy living and/or sugary drinks.
- Posters.
- A set of 14 laminated cut-outs of common beverage types with nutritional information.
- Thirty information booklets for families to bring the messages about sugary drinks into the home.
- A copy of *Eating Well with Canada's Food Guide*.

3. Evaluation of the Sip Smart! BC Pilot

In the 2008–2009 school year, a pilot of the Sip Smart! BC program was delivered in 230 Grades 4, 5 and 6 classrooms across the province, educating students about sugary drinks. The Social Research and Demonstration Corporation (SRDC) was commissioned by the Michael Smith Foundation for Health Research to conduct an evaluation of the Initiative. The learning module consisted of three 45-minute sessions delivered in classrooms by trained facilitators over six to eight weeks and included a take-home resource booklet for families. The Sip Smart! pilot project provided a unique opportunity to learn about the implementation and outcomes of a province-wide educational intervention that addressed the consumption of sugary drinks in children.

3.1 Summary of Evaluation Findings

The evaluation of the pilot project involved 520 Grade 4 students in 20 classrooms that received Sip Smart! and 493 Grade 4 students in 20 comparison classrooms. Students completed a Drinks Diary at baseline, mid-program and at a six-month follow-up.⁴ The short-term results of the pilot project are promising. Students' knowledge and awareness of sugary drinks increased during and following the program; however, changes in consumption of sugary drinks (mainly pop) observed during the program were not sustained and observed at follow-up. The program included three 45-minute lessons delivered over a six- to eight-week period; it appeared that the program was likely too short to maintain outcomes observed at mid-program. The evaluation

³ The Sip Smart! Drink Diary helps to raise students' awareness of their drinking patterns and behaviours. Students record what beverages they consume on three separate occasions over the course of the program. The Drink Diary Calculator is a tool for teachers to use to calculate and report back to students.

⁴ Additional information about the evaluation of the Sip Smart! pilot project including evaluation methodology, analysis, results and lessons learned can be found in a forthcoming report by Gurr, Dobson & Dixon (2010), due to be released in October 2010.

recommended that the program should be longer, reinforced in later grades, or both, if long-term outcomes are desired.

4. Sustainability of the Sip Smart! BC Teacher Resource

During the two years following the release of Sip Smart! it was planned that the HSFBCY would incorporate the resources into their HeartSmart Kids™ program. As well, Action Schools! BC would be another key distributor of the resource. The program was originally scheduled to be finished by September 2009. Following the pilot of Sip Smart! in the 2008–2009 school year, the materials, content and delivery were revised based on feedback from users and evaluation findings. The resource was changed from being delivered by an outside facilitator, to being teacher-led. The following describes the promotion and distribution of the resource in the 2009–2010 school year.

4.1 Promotion

The Project Manager mapped out various routes that teachers could be reached and methods that might be used to promote the Teacher Resource through a variety of strategies, including newsletters, workshops, word of mouth, online promotion and conferences. As well, the Resource was promoted to a variety of audiences in addition to teachers. Nutritionists, principals, Public Health Nurses, and Parent Advisory Committees were informed about the Resource by HSFYBCY, Action Schools! BC and Community Nutritionists. It was also hoped that once individuals learned of the Resource, they would tell fellow teachers about it as well to use in their classrooms. Action Schools! BC Regional Trainers promoted the Resource through Action Schools! conferences and workshops, along with other resources for teachers that are included in resource boxes for participating Action Schools. Community Nutritionists promoted the Teacher Resource to those who worked with school-age children, Public Health Nurses, and parents, and would refer individuals to the website for information on how to obtain a copy.

4.2 Resource Distribution

A distribution plan for the Teacher Resource was created by the Sip Smart! Project Manager. As noted previously, the Resource was incorporated into the HSFBCY's HeartSmart Kids™ program and was also included in the resource boxes distributed by Action Schools! BC to new Action Schools. A total of 2,750 hardcopies of the Teacher Resource were printed, along with 900 class sets containing 30 booklets for families, and 500 Internet supplement packages. Enough resources were made available for 50 per cent of teachers of Grades 4 to 6 in BC; there are approximately 4,500 individuals who teach Grades 4 through 6 in the province (BC Ministry of Education, 2010). The HSFBCY distributed the majority of the print resources throughout the 2009–2010 school year. Teachers could also download a version of the Resource from the BC Pediatric Society website. When teachers downloaded a copy, they would request for a hard copy of the supplement materials (e.g. drink cut-out) from the HSFBCY. The number of copies downloaded of the resource is unknown; however, 35 Internet supplement material kits have been requested as of August 2010.

A few issues with the distribution of the resources were encountered at the start. As a result, it took longer than anticipated for the first packs to go out - they were originally planned for early fall, but the majority did not go out until the third week of October some as late as early November. Currently, when the HSFBCY receives a request for a Teacher Resource, it takes approximately one month for the teacher to receive their binder. In addition to resources being distributed through the HSFBCY, it was originally planned to include the Teacher Resource in resource boxes that went out to teachers in new Action Schools. However, Action Schools receive orders for boxes in the winter and spring of the previous school year for use in the upcoming school year; because the resources were not ready for distribution until August 2009 they were not included in the boxes that had been set to schools in the spring of 2009. Once the Teacher Resource was ready for inclusion in the Action Schools! resource box, all future orders for new Action Schools included the Sip Smart! BC Teacher Resource. The Resource was also available to Action Schools that had received resource boxes prior to the availability of the Sip Smart! BC Teacher Resource by request. As of August 2010:

- 35 Internet packages have been distributed to complement the electronic version of the Teacher Resource.
- 2,145 individual parent booklets have been distributed through HSFYBCY.
- 1,032 hardcopy Teacher Resource's have been distributed through HSFBCY.
- 54 hardcopy resources were distributed at Sip Smart! BC workshops.
- 212 Action Schools! BC Healthy Eating Bins for Grades 4 to 7 were distributed to 71 schools across the province between August 2009 and June 30, 2010. Each bin contained one copy of the Sip Smart! BC Teacher Resource.

5. Evaluation of the Sip Smart! BC Teacher Resource

SRDC was commissioned by the BC Pediatric Society and the HSFBCY to conduct a process evaluation of the Sip Smart! BC Teacher Resource. The aim of the evaluation was to gain a clear understanding of how the Teacher Resource was implemented, delivered, and promoted to teachers in BC schools. As well, feedback was sought from teachers about their experiences using the Teacher Resource.

5.1 Methodology

The process evaluation used both quantitative and qualitative methods.

- SRDC conducted online surveys with teachers and Action Schools! BC Regional Trainers from May to June 2010. SRDC contacted 490 teachers who had requested a copy of the Teacher Resource by December 2009 and received a hard copy of the resource through the HSFBCY to complete an online survey. The survey asked about their use of the resource in the classroom, benefits of the resource, and feedback about what works well and what can be improved.
- An online survey was distributed in July 2010 to 75 Action Schools! BC Regional Trainers. Trainers were asked about their experience with promoting and distributing the resource.
- Focus groups were conducted in June 2010 in eight Grade 5, 6, and 6/7 classrooms in Lower Mainland, BC. Students were asked what they remembered about the Sip Smart! lessons and activities, what they liked most and least, and what beverages they currently consume currently.
- Those involved with the promotion and dissemination of the resources were interviewed in June 2010, as well as two Community Nutritionists about their experiences with the resources and feedback and suggestions they may have.

5.2 Limitations

The evaluation findings should be viewed with the following qualifications:

- Focus groups were not conducted with Grade 4 classrooms; however, the prior evaluation of the pilot project was conducted with only Grade 4 students and provides details to their experiences with the program. The experiences of the Grade 4 students with the pilot project appear similar to the experiences of the Grade 5 and 6 students in the focus groups.
- The current evaluation was not intended to measure changes in student's behaviour, attitudes and knowledge of sugary drinks as a result of the delivery of the teacher-led Sip Smart! program. The evaluation of the pilot project included an outcomes study and reported on Grade 4 students' changes in behaviour, attitudes and knowledge during and following the delivery of the program.

- Only teachers who requested a print copy of the Teacher Resource from the HSFBCY by December 2009 were contacted to complete a survey. It is unknown what the usage is of the resource by those who downloaded an online copy, received a copy from Action Schools! BC, or received a copy through the HSFBCY after December 2009.
- There was a 21 per cent response rate to the online survey of teachers who had requested a print copy of the Teacher Resource from the HSFBCY by December 2009. The results presented may not be representative of all those who received the Teacher Resource.

6. Evaluation Findings

The following presents the findings from the evaluation from the perspectives of the promoter, distributors of the Teacher Resource, such as the Project Manager, Action Schools! BC and Community Nutritionists, teachers who received the resource and Grade 5 and 6 students from classrooms where Sip Smart! lessons and activities have been delivered.

6.1 From the Perspective of those who Promote and Distribute the Resource

Interviews were conducted with the Project Manger regarding the implementation of the sustainability plan for the Teacher Resource and feedback about what worked well, what could be improved upon and what were the future plans for the resource. As well, one interview was conducted with a staff member of Action Schools! BC involved with the incorporation of the Teacher Resource into the resource boxes distributed to teachers within new Action Schools. In addition, an online survey was distributed to Action Schools! Regional Trainers (75 Regional Trainers and two Master Trainers) in July 2010 requesting their feedback and experiences with promoting the Teacher Resource in school districts across BC. A total of 10 Regional Trainers completed the survey, with two reporting that they were not familiar with the Sip Smart! BC Teacher Resource. Finally, two Community Nutritionists with BC Health Authorities were interviewed about their experiences with the Teacher Resource.

As mentioned previously, the distribution of the Teacher Resource was shared primarily between the HSFBCY and Action Schools! BC. Issues such as staff turnover, training of staff responsible for distribution and responding to requests for resources, and a delay in printing resources delayed the initial distribution timeline by several weeks. However, the issues encountered were addressed and distribution of the resources has been reported to be running smoothly.

6.1.1 What Has Worked Well

Despite encountering some problems at the start of distribution, the system that is currently in place is working well and the sustainability plan for the 2009–2010 school year was implemented as originally planned. Project staff are satisfied and happy with the way operations are currently running. Staff feel that their goals have been reached, and students, parents and teachers are more informed about sugary drinks. Sip Smart! also exceeded the distribution goal that was originally set, which was distributing materials to 1,000 classroom teachers across BC.

It appears as though the partnership with Action Schools! BC is well-suited for the promotion and distribution of the Teacher Resource. As well, the resource fits well with the expanding Healthy Eating component of Action Schools! Regional Trainers for Action Schools! BC also reported that teachers have responded favourably to the resource and many indicated that they were willing to try the lessons and activities in their classroom.

6.1.2 What Can Be Improved Upon

The current Sip Smart! BC program is dependent on future funding. There are currently enough resources to supply 50 per cent of teachers in BC who instruct Grades 4, 5 and 6. Ideally the program would like to print additional copies and materials to supply the remaining 50 per cent. As well, while the teacher resource can be re-used each school year, one component that currently lacks sustainability is the parent handbook. This component may be the hardest part of the program to sustain as booklets need to be continually replenished annually. One solution suggested was for teachers to create “classroom sets” of the parent booklet, number each one, and lend them to students at the start of the school year and have them returned at the end of the school year. As the resource is available to teachers through a variety of venues (e.g. HSFBCY, Action Schools! BC, and online), a mechanism to monitor the numbers distributed would be helpful.

The Sip Smart! lessons are laid out in the Teacher Resource for two different levels, depending on the grade being taught. By having two levels for each lesson it is possible for students to experience Sip Smart! twice in a three-year period. For example, students would receive Level 1 while in Grade 4 or 5, and receive Level 2 when they are in Grade 5 or 6; this could further reinforce the messages of the program. The use of the extension classroom activities and online resource can also help with reinforcing messages about sugary drinks outside of the Sip Smart! lessons, and it was suggested that these additional resources may need to be promoted more to teachers.

Additional suggestions for improvement from those involved with the promotion and/or distribution of the Teacher Resource included:

- Having a one-page handout on the website for parents.
- Targeting the website to dentists as well as teachers (pediatric and regular dentists).
- Having a condensed version of the lessons for teachers who are only going to have enough time to talk about Sip Smart in one or two classes.
- Having bookmarks available in school and public libraries with the website address.
- Having the program translated into other languages.
- Being able to purchase additional materials, such as posters for a nominal cost.

6.1.3 Future Plans

The Sip Smart! BC program is currently funded until December 2010 and there are plans to provide more workshops in schools across the province to promote the Sip Smart! BC Teacher Resource. There are plans to deliver 20 workshops in the upcoming 2010–2011 school year, with more than half already scheduled. The program has gained some momentum and addressed issues with distribution. The program will also be promoted at the coming Provincial

Intermediate Teachers' Association conference. The program was also promoted through a mail-out to teachers in May 2010, and since then at least 75 resources have been ordered.

They will continue promotional activities with the Health Network newsletter and other electronic communications in addition to the work with Action Schools! BC, the HSFBCY, and Community Nutritionists within each health authority. Action Schools! BC will continue to include a hard copy of the resource with their resource boxes that go out to teachers in elementary schools throughout the province.

In addition to continuing to promote and distribute the resource in BC, the program has been noticed by others outside the province. In Quebec, the program will be translated into French for elementary students, and in the Northwest Territories an Aboriginal adaptation will be initiated. Because Sip Smart! has been trademarked, the program retains ownership over the name, content and materials and will have access to the French translation and Aboriginal adaptations once complete; this will greatly expand the reach of the program in BC and beyond.

6.2 From the Perspective of Teachers

While the Sip Smart! BC Teacher Resource was promoted to a variety of potential users such as Public Health Nurses, Community Nutritionists, and school principals in addition to teachers of Grades 4 to 6, the evaluation focused on the feedback and experiences of teachers who are familiar with the resource and have delivered at least one of the Sip Smart! lessons in their classrooms. In May 2010, 490 teachers who had requested a print copy of the resource from the HSFBCY by December 2009 were contacted via email and asked to complete an online survey about their experience and use of the Sip Smart! BC Teacher Resource. Of the 490 emails sent, six were returned as a result of email addresses that were no longer valid; 102 out of the 484 teachers responded to the survey (21 per cent).

Of the 102 teachers, 45 responded to the email request stating that they had not used the resources in their classrooms. Approximately 30 per cent (N=14) noted that they plan to use the resource and deliver Sip Smart! lessons in their classroom in the next school year. Three reported that they had yet to receive their Sip Smart! BC Teacher Resource. The other 57 teachers completed the survey and provided information about their use of the resource, reception in the classroom, and feedback about the content and materials. The following analysis is based on the 57 respondents who used the resources.

Most teachers who responded to the survey taught in elementary (K-7 or lower) schools (N=45); seven teachers indicated they taught in a middle school. Teachers also indicated the Grade level they taught (Table 6.1). A total of 47 of 57 respondents indicated that their school was an Action School.

Table 6.1: Grade Levels Taught by Survey Respondents (N=57)

Grade 6/7	7
Grade 6	9
Grade 5/6	8
Grade 5	8
Grade 4/5	5
Grade 4	8
Grade 3/4	3
Other	6

6.2.1 Knowledge and Use of the Resource

Teachers were asked how they first learned of the Sip Smart! BC Teacher Resource. Table 6.2 lists the various organizations and venues that teachers first learned about the resources. The top answer was being a participant in the 2008–2009 Sip Smart! pilot project; the slurpee drink flyer was a distant second.

Table 6.2: How BC Teachers First Learned of the Sip Smart! BC Teacher Resource (N=57)

	Number
Participant in Sip Smart! BC pilots from 2008–2009	18
Flyer with slurpee drink mailed to school	6
Another teacher	5
Electronic newsletter (e.g. Healthy Schools Newsletter)	5
Sip Smart! BC Workshop	4
ActNow BC!	4
Advertisement (e.g., BCTF Newspaper, BCPVPA Journal)	2
Given or picked up a card advertising Sip Smart! BC	2
HeartSmart Kids™ Workshop	2
Other (e.g., Community Nutritionist)	2
PITA Conference Marketplace	2
School District communication/newsletter	2
Action Schools Workshop	1
Principal	1
Other electronic source (e.g., DASH website)	1

Teachers were also asked to select from a list of reasons what their main reasons were for requesting a copy of the Teacher Resource. The main reasons that teachers indicated were:

- They wanted to educate their students about sugary drinks (N=51);
- They wanted to promote health in school (N=50);
- The resources were free (N=38);
- The resources met curriculum guidelines (N=38); and
- They heard it was a good resource (N=13).

Teachers were also asked where they received their copy of the Teacher Resource. Approximately 50 per cent (N=28) they received their hardcopy from the HSFBCY; 23 per cent received it from Action Schools! BC; 26 per cent reported receiving their copy from “other,” and one person downloaded an online copy of the resource. It is unclear why 23 per cent reported receiving their copy from Action School! BC and 26 per cent reported “other” as all those who

were contacted and asked to complete the survey requested a print copy from HSFBCY. It is possible that some associated the Teacher Resource with other healthy living school initiatives.

Of the 57 teachers who responded to the survey, all delivered at least one of the Sip Smart! lessons, with 77 per cent (N=44) delivering three or more lessons and 44 per cent (N=25) delivering all 5 lessons. The lesson delivered most often was Lesson 2: Sugar, Sugar! (N=50). In total, teachers reported delivering three to five hours of Sip Smart! lessons and activities in their classrooms. Teachers also reported the main Sip Smart! resources they used in their classrooms, as follows:

- Teacher resources such as posters and Caffeine Symptoms (N=43);
- Handouts (N=42);
- Drink cut-outs (N=41);
- Booklets to send home to parents (N=39);
- Overheads (N=34);
- Selected activities such as the Tooth Experiment (N=30); and
- Backgrounders (N=26).

The online resources showed less use compared to those included in the hard copy of the Teacher Resource. Sixteen individuals accessed the Online Drink Diary, and 12 accessed the Online Videos; only one individual reported accessing other online resources such as the PowerPoint for Families.

6.2.2 Feedback on the Sip Smart! BC Teacher Resource

Overall, the vast majority of teachers (89 per cent; N=51) who responded to the online survey were either Satisfied (32 per cent; N=18) or Very Satisfied (58 per cent; N=33) with the Sip Smart! BC Teacher Resource. As well, 63 per cent (N=36) felt no additional resources need to be added. When asked whether they felt the Sip Smart! program complemented other healthy eating and nutrition initiatives in their school, 82 per cent agreed (N=48).

Since receiving their Teacher Resource, 37 of 57 (65 per cent) teachers reported they have referred to sugary drinks in other subject areas outside of the Sip Smart! lessons. Also, almost 88 per cent of survey respondents stated they would recommend the Sip Smart! BC Teacher Resource to other teachers to incorporate into their classroom teachings. Many (68 per cent; N=37) also plan on delivering Sip Smart! lessons and activities in the 2010/2011 school year; 14 respondents were undecided and three did not provide a response.

***“Excellent resource!
Thank you on behalf of
my students and myself!”***

Survey respondents were asked about what they felt were the main benefits of the Sip Smart! program in general, for students, and for parents and guardians. Respondents like that the resources:

- Included ready-to-use lessons;
- Helped shorten their lesson preparation time; and
- Were fun and engaging.

Two of the main benefits teachers saw for students were that the program enables students to make healthy drink choices, and it increases students' awareness about healthy beverage choices. Respondents also noted that the program benefits parents by providing resources for parents and guardians to support their children's beverage choices; the parent booklet raises awareness among parents and provides good information for their child to know.

“Thank you to everyone who made this resource available!”

6.2.3 Suggestions for Improvement

As mentioned above, survey respondents were satisfied with the Sip Smart! BC Teacher Resource and many felt that there were no additions (N=36) or changes needed (N=42). Some of the resources that were suggested for addition were:

- Handout for students about the benefits and health effects of drinking water;
- Health effects of energy drinks;
- Information about what blood sugar is and the connection between sugar and diabetes; and
- More emphasis on healthy drink alternatives.

Changes that were suggested included:

- Organization of the lessons — by level and grade; and
- Organize materials for each lesson within the same section or provide references for the teacher as to what page the materials can be found on.

“I think this is a great program. It addresses an area that is becoming epidemic in our youth. Targeting the Grade 4/5 level is very powerful. I will be recommending the program to all of our teachers...”

6.3 From the Perspective of Students

The Sip Smart! teacher-led module is designed for students in Grades 4 through 6. In the evaluation of the pilot project of Sip Smart! Grade 4 students were assessed at the start and end of the program, and changes in their behaviour, knowledge and attitudes were measured. The current evaluation focuses on students' experience with the program delivered by their teacher, and what components and messages from the program made an impression.

6.3.1 Focus Groups

Eight focus groups were conducted in June 2010 with a total 198 students from Grades 5 and 6 in Lower Mainland BC. Table 6.3 shows a breakdown of number of students by Grade level.

Table 6.3: Number of Students in Each Focus Group by Grade Level

Focus Group	Grade Level	Number of Students
Focus group 1	5	30
Focus group 2	5	21
Focus group 3	5/6	27
Focus group 4	5	29
Focus group 5	5	28
Focus group 6	6/7	23
Focus group 7	6	14
Focus group 8 ⁵	5	26
Total number of students		198

Students were asked about what they remembered most from the Sip Smart! program, what lessons or activities they liked best and least, whether they talked to their friends and family about what they learned, and whether they would give the program a “thumbs up” or a “thumbs down.” As well, to generally gauge students' drinking behaviours, students were asked what types of beverages (e.g., milk, water, fruit juice) they liked or did not like and why and how many students consumed each type of beverage on a regular basis.

⁵ At the start of this focus group, only 13 students were in attendance due to a school function; by the mid-point of the focus group all 26 students were in attendance.

6.3.2 What Did They Remember?

The five Sip Smart! lessons deliver nine key messages to students about healthy beverage choices and sugary drinks. What student remembered learning about included:

“Water is the healthiest choice”

- That water is a healthy beverage choice and that it contains no sugar;
- About the sugar content in a variety of beverages and how much sugar they can consume in one day; and
- About caffeine, and how different drinks can influence their health and body.

Students also talked about the different activities that were delivered and the materials that were used. For example, what one student remembered the most was the Sip Smart! “drink character” on the skate board. Other students talked about:

“We learned about how much sugar is in different drinks”

- Learning how to read labels on different beverages;
- Learning and seeing how many sugar cubes are in each drink, in particular slurpees, and which ones are healthy choices;
- The tooth experiment and learning the what sugar can do to the body; and
- Doing skits, crosswords and word searches, and making posters.

6.3.3 What Stood Out

Students were asked what activities they liked the most and the least. Students enjoyed activities such as the tooth experiment and making posters. Students particularly liked learning about how much sugar was in each type of drink, with one student stating “how surprising it was to see how much sugar was in different drinks” when asked what they remembered the most from Sip Smart!

Students did not appear to enjoy the activities that were less interactive such as the crossword, the Drink Diary, and reading about sugary drinks. However, overall 83 per cent gave the Sip Smart! program one of two thumbs up⁶. Students found Sip Smart! interesting and liked learning about how much sugar in is different types of drinks. Overall, seventeen percent gave the program one or two thumbs down, stating they felt that the content and/or activities were

⁶ Of the 198 students, 31 did not provide a response to this question.

“boring”. It is unknown however if they felt the Sip Smart! program overall was boring or were referring to a specific lesson and/or activity.

6.3.4 What Did They Tell Their Friends and Family

During the focus groups, students were also asked whether they remembered talking to their friends outside the classroom or family members about what they learned about sugary drinks. Sixty-five per cent (N=128) reported that they told their families about what they had learned in school about sugary drinks. Some of what they told their families included:

- “I told my family how much sugar was in pop and how they should cut down on it.”
- “I took the booklet home and talked with my mom about how much sugar is in drinks. She used to add 2 spoonfuls of sugar to her coffee and now she only adds one.”
- “I went home and talked to my dad about how much sugar was in pop, and he took away my pop privileges.”
- “That every time I get a slurpee after I cut the grass, that I usually get a medium slurpee but now I choose a small one.”
- “I told my mom how many sugar cubes are in each drink.”

Fewer students, 32 per cent (N=64) remembered talking with their friends from outside the classroom about what they learned about sugary drinks. It should be noted however, that 28 of the 64 students who remembered talking with their friends outside of class were from one class where the teacher assigned them the role of “sheriffs” in their school, where they were to approach students when they are making healthy choices. Some of what students remember telling their friends were:

- “My friend always drinks giant slurpees and I told her how much sugar was in them.”
- “I have a friend with a four-year old brother and I saw that he had a medium bubble tea and told him that it had 21 sugar cubes in it.”
- “I told my friend how much sugar we’re supposed to have each day.”

6.3.5 Consumption of Sugary Drinks

Following discussion in the classrooms about the Sip Smart! program, the focus group facilitator asked students how they felt about specific types of beverages, whether they liked them, whether they feel it is a healthy drink, and whether they drink it on a regular basis. Beverages students were asked about were:

- Water;
- Pop;
- Milk;
- Chocolate milk;
- Fruity drinks;
- 100% juice;
- Sports drinks; and
- Tea/coffee.

“We were surprised by how much sugar we were drinking. We guessed we would be drinking less sugar than we really were.”

The vast majority of students reported that they liked water, thought it was a healthy beverage and drank it regularly. Students also reported that liked pop, however almost all acknowledged that pop was an unhealthy drink and a small portion of students reported that they drink pop regularly.

“Most of our body is made of water and we need to drink it to keep enough in our bodies.”

The majority of students also reported that they liked milk and chocolate milk, with a few more liking chocolate milk over regular milk. However, more students felt that milk was a healthier drink option than chocolate milk, and only 20 per cent indicated that they drink chocolate milk regularly compared to 86 per cent to drink regular milk. More students like 100% juice compared to fruity drinks, and the majority indicated that 100% juice is a healthy drink. The majority of students (66 per cent) also reported to drink 100% juice regularly compared to approximately 20 per cent of students reported drinking fruity drinks.

Many students reported that they like sports drinks; however they indicated that it was not a healthy drink. Only a small proportion of students reported that they consumed sports drinks on a regular basis. Finally, over 80 per cent of student reported that they like tea or coffee, however none indicated that it was a healthy drink and only one student reported drinking tea or coffee on a regular basis. The findings mentioned are consistent with those found in the evaluation of the pilot project.

“Sometimes sugary drinks don’t quench my thirst as well as water.”

7. Conclusion

The launch of the Sip Smart! program as a teacher-led initiative is still in its early stages; however, there is indication that the promotion, distribution and use of the resource is going well. At the start of the 2009–2010 school year the distribution of the resources were still being fine-tuned. These have since been addressed and plans are now in place for the upcoming 2010–2011 school year. SRDC attempted to contact 490 teachers who requested (by early December 2009) and received a hard copy of the resources through HSFBCY to ask them to complete an online survey. The overall response rate was 21 per cent: 57 teachers completed a survey (12 per cent response rate) and provided feedback and information about their use of the resources. Overall, teachers liked the resources and 25 (44 per cent) delivered all five lessons. Many had difficulty finding time to deliver all lessons and activities and made some modifications to fit this. Teachers also preferred to use the hard copy materials, and showed less interest in using the online resources and activities. In addition to the 57 teachers who completed the online survey, we received feedback from an additional 45 teachers (9 per cent response) that they had received their resources but had not delivered any of the lessons or activities. Reasons for not delivering the resources included not having enough time to incorporate the materials, and time already taken by other initiatives in the school, however one-third said they plan to use the resources in

the upcoming school year. As well, focus groups were conducted in eight classrooms in the Lower Mainland with students in Grades 5 to 6 in June 2010. Students remembered learning about sugary drinks and what drinks have a lot of sugar in them.

7.1 Lessons and observations

- Teachers liked the Sip Smart! BC Teacher Resource and found it to be user friendly, with materials and lesson guides that were ready to use and involved little advanced preparation.
- Students in focus groups recalled many of the key messages of the Sip Smart! program:
 - Water is a great drink choice.
 - Knowing what is in drinks helps individuals make healthy beverage choices.
 - The number and size of drink services affect the amount of sugar consumed.
 - Sugar is a major ingredient in many popular drinks.
- Students responded favourably to activities where they were engaged. Students responded less favorably to activities that they completed on their own, such as the crossword, word search, and reading information about sugary drinks.
- The consumption of sugary drinks students reported in the focus groups is consistent with findings from the evaluation of the Sip Smart! pilot project.
- Teachers surveyed used the online Sip Smart! resources least compared to the print copy resources. However, those surveyed were teachers who requested a print copy of the resource. A future survey of those who download the resource and access the additional online resources may provide some insight into their application and use by teachers.
- Increased promotion of the online activities and classroom extension activities may increase their use by teachers and help reinforce messages delivered in the Sip Smart! lessons and supporting activities. If effective, this may be a less costly way of sustaining the program as well.
- A class set of Parent Booklets are provided to teachers who receive a Teacher Resource, whether in hard copy, or in the Internet supplement package. If these booklets are distributed to parents each school year, new copies are needed annually. Securing future funding to print the booklets annually would be needed to sustain the Parent Booklet. An alternative to this is for teachers to create a class set of Parent Booklets where each student is issued one booklet at the start of the school year and is required to return it at the conclusion of the school year.
- It is unknown how many teachers have downloaded an online copy of the Teacher Resource. Tracking and monitoring the number of downloads could provide information about the demand of the online version and interest in the resource.
- Also, the exact number of print copies of the Teacher Resource distributed to data is uncertain. It would be advantageous to create a tracking system of the print resources including what school districts and grades the resource has been distributed to.
- Follow-ups with teachers who received the Teacher Resource to remind them to use the resources would be key to ensuring the delivery of all the lessons in the classrooms, as only 44 per cent of the survey respondents indicated that they had delivered all five lessons in the 2009–2010 school year.

8. References

BC Ministry of Education. 2010. *Summary of Key Information*. Retrieved August 12, 2010 from <http://www.bced.gov.bc.ca/reporting/docs/ski.pdf>

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