School Fruit and Vegetable Snack Initiative

Evaluation of the implementation of the 2006/2007 provincial roll-out
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**Executive Summary**

Inadequate F&V consumption has been associated with increased cardiovascular disease (CVD), obesity, Type II diabetes, strokes, hypertension and cancer (Long and Stevens, 2004). In British Columbia, 64.5% of adults do not meet the recommendations for F&V intake (BC Ministry of Health, 2004). Seven out of 10 Canadian children aged 4 to 8 do not meet the five-serving minimum (Statistics Canada, 2004). Establishing healthy eating habits in early life may contribute to healthy eating in later life (Holcomb et al, 1998). Thus, interventions focused on childhood can contribute to overall population health (Baxter et al, 1997). The majority of children in developed countries can be reached through elementary schools and schools have substantive and sustained contact with children over time, making the school an important setting for public health intervention (Fox, Cooper and McKenna, 2004; Veugelers and Fitzgerald, 2005).

In 2005 three government Ministries (Health, Education, Agriculture) came together with industry and non-government stakeholders to develop a School Fruit and Vegetable Snack Project pilot (SFVSP). The pilot was administered by the BC Agriculture in the Classroom Foundation and provided children in ten elementary schools across the province with BC grown fresh fruits and vegetables twice a week. The pilot evaluation showed that children in SFVSP schools: 1) reported eating more fruit and vegetables, 2) ate at least 5 fruit and vegetable servings per day, 3) ate on average 1 serving more than children in a comparison condition and 4) if they were eating less than 5 fruit and vegetable servings per day before the program they increased their consumption by two servings. Knowledge of BC grown apples increased significantly and teachers, suppliers and distributors were highly satisfied with the program, felt it aligned with their values and that they could observe the benefits in the children (Naylor and Bridgewater, 2006).

Based on these evaluation results a provincial roll-out was planned beginning with an expansion to 51 schools from February to June 2007 (Phase II). To facilitate sustainability and potentially long-term feasibility, school-level coordination was undertaken by Parent Advisory Committees. BC Agriculture in the Classroom contracted the University of Victoria to conduct an external evaluation of the second phase implementation to determine how it was delivered (fidelity) and its feasibility and acceptability.
Key Findings

Fidelity

School logs showed that the product was delivered as intended with some minor variations in product and challenges related to the timing of delivery. Most challenges were resolved immediately with the help of the Provincial Coordinator. Qualitative data illustrated that one of the key challenges for the program is ensuring that the teachers had systematic and regular access to information.

Satisfaction with the program

Teachers, administrators, parental advisory committees (PAC), and suppliers and distributors were satisfied with the SFVSP. 100% of the teachers, administrators, and PAC’s who were interviewed were in favour of continuing with the program. All of the suppliers and distributors also indicated they would like to be involved in the program again.

School surveys showed that more than 80% of respondents were satisfied or very satisfied with all of the SFVSP program components.

Sample quotes from stakeholders best illustrate the level of satisfaction

School stakeholders

“We would like to see things continued on an ongoing basis.” Administrator

“It is a good program, the kids like it a lot, they are disappointed when it is not here.” PAC

“I think it is great, my kids are so excited about it”. Teacher

Suppliers and Distributors

“It’s a wonderful program, I love being a part of it, and hope we can be part of it again next year.”

“Our company takes pride in being part of this program.”
Feasibility
The SFVSP was feasible to implement in the BC context. Critical success factors that were emphasized by stakeholders included:

Support
100% of the teachers and administrator comments indicated that the ‘support’ in its various forms enabled easy implementation. School stakeholders emphasized the importance of regular and routine delivery of the fruit and vegetables, the dedicated individual to prepare and bring it to the class and the funding for the program. Teachers and administrators emphasized the importance of the role of the PAC specifically as a key support that made implementation possible.

*The PAC, the parents are crucial to making this program work. – Teacher*

Compatibility
The program aligned with what the stakeholders valued. Teachers, administrators, suppliers and distributors emphasized the importance of the child throughout their feedback. Teachers valued addressing the needs of BC children and the children’s acceptance of the program. Suppliers and distributors commented on the positive effects of being involved in the SFVSP as aligning with their values by contributing to children’s health.

Observable Benefits
FOR CHILDREN:

The program was facilitated by teacher and administrator beliefs the program had benefits for children.

“It is going well, the kids really enjoy it, there seems to be more discussion around fruits and vegetables now.”

“I’ve had a few of the kids who’ve come with cucumbers in their lunch because they were introduced to it and it’s really exciting to see.”

“I can’t imagine not having it here because I worry that often my kids make their own breakfasts, their own lunches and if there’s no one to support them they don’t eat, so having those snacks is crucial.”
Providing healthy opportunities for those ‘in need’ and the influence of peers on behaviour were the commonly cited benefits of the SFVSP ‘school-based’ approach. Stakeholders continually emphasized how much they valued these benefits and how the SFVSP aligned with these values.

FOR BUSINESS:

Suppliers and distributors believed that the program would have benefits for both the health and agriculture sector and for their businesses. The program extended their reach to their target market, created efficiencies, networked them with like-minded businesses and enhanced the potential of their business.

“I’m ecstatic about it, I just think it is the greatest thing. I’ve always wanted to see this happening in the schools because all the time you see kids eating junk food. I like the fact that it’s an educational program and that it connects agriculture to the upcoming generation, it makes a lot of sense.”

Credibility

The high quality of the fruit and vegetables was emphasized as a key facilitator to acceptance by the children and therefore a facilitator of implementation. Issues with quality were not prevalent but when they occurred they were commented on as a barrier.

Other benefits of the program

Key operational issues to consider in the future include: managing the quantity from school to school and class to class to prevent waste, increasing variety, providing materials for use in the classroom, and distributing those materials that have been developed, as many of the school personnel were not aware of the resources. A further operational issue discussed by the stakeholders was the packaging. There was mixed feedback, with some finding the packaging helpful, as individual pre-packaged snacks were seen as treats, while others were concerned about the environmental impacts of packaging.
Unique Feasibility considerations for High Schools

Although participating high schools and middle schools were satisfied with the SFVSP there were three key issues raised by participants that were unique to the high schools that participated: 1) inappropriate use of the food by students when access wasn’t monitored, 2) delivery of the fruit and vegetables to class areas where there were restrictions on food consumption (e.g. the gymnasium) and 3) the unrealized opportunity to engage the student leadership program in coordination and delivery in the high school setting.

Summary

The PAC facilitated SVFSP program was well accepted, easy to implement and had a support infrastructure that was responsive to project implementation issues. The positive school and stakeholder response to the program was similar to the pilot phase and the schools and business stakeholders were universally enthusiastic about the program and its continuation.

The findings from the survey, logs, focus group and one-on-one interviews reflected similar themes. School level stakeholders continually emphasized the importance of regular, simple delivery of fruit and vegetables that was supported by a designated person in their school and facilitated by a provincial coordinator. Key implementation facilitators included: the resources provided (funding, fridges, written material) the Parent Advisory Committee coordination, the quality of the produce, the observed changes and benefits for children, the alignment with school and teacher values and approaches, the willingness of the school staff to make it work and support from the Provincial Coordinator. Key implementation challenges were: difficulty identifying volunteers to provide consistent coordination, lack of storage space for the produce bins, coordination between school staff and PAC for delivery and lack of knowledge about the resources provided. Despite some of these reported challenges, 100% of the evaluation participants wanted the program to continue.

There were three key areas where the feedback varied: 1) schools that participated in the pilot found the new model and the intake process more challenging, 2) high schools faced unique challenges, 3) knowledge of and satisfaction with the written resource materials varied widely across schools.
The positive value of the program for children, the health of the community and the agricultural sector, efficiency of operations, good communication and the ability to plan for large volumes of produce delivery were also important to the business stakeholders.

**Key Recommendations for the Future**

- Maintain a designated coordinator at the school and provincial level, as these positions were key to implementation success.

- Expand educational materials as support for teachers to use in the classroom if they wish.

- Improve the mechanism of disseminating the educational materials to the teachers.

- Continue providing incentives to the PAC’s to promote participation in the program.

- Transfer the knowledge of how the different structure and organization of high school life was accommodated in schools.
Chapter 1  Background and Rationale

Background

In response to emerging International evidence, the Select Standing Committee of Health recommended that a Fruit in Schools Program be fully explored and supported” (Recommendation # 9). Three government Ministries (Health, Education, Agriculture) came together with industry and non-government stakeholders to develop a School Fruit and Vegetable Snack Project pilot (SFVSP).

The SFVSP was developed based upon Act Now BC principles, one of which is to ensure that each government Ministry makes policy and program decisions that promote healthy growth and development in childhood and reduces the risk of chronic disease. ActNow BC is a partnership-based, cross-ministry health and wellness initiative that promotes healthy living choices to improve the quality of life for all British Columbians. In 2005/2006 the first Canadian pilot of a SFVSP was administered by the BC Agriculture in the Classroom Foundation and provided children in ten elementary schools across the province with BC grown fresh fruits and vegetables twice a week.

The pilot evaluation showed that children in SFVSP schools: 1) reported eating more fruit and vegetables, 2) ate at least 5 fruit and vegetable servings per day, 3) ate on average 1 serving more than children in a comparison condition and 4) if they were eating less than 5 fruit and vegetable servings per day before the program they increased their consumption by two servings. Knowledge of BC grown apples increased significantly and teachers, suppliers and distributors were highly satisfied with the program, felt it aligned with their values and that they could observe the benefits in the children (Naylor & Bridgewater, 2006).

Based on these evaluation results a provincial roll-out was planned beginning with an expansion to 51 schools from February to June 2007 (Phase II). To facilitate sustainability and potentially long-term feasibility, school-level coordination was undertaken by Parent Advisory Committees. BC Agriculture in the Classroom contracted the University of Victoria to conduct an external evaluation of the second phase implementation to determine how it was delivered (fidelity) and its feasibility and acceptability to both elementary and senior schools.
Rationale:

Inadequate F&V consumption has been associated with numerous chronic diseases such as cardiovascular disease (CVD), obesity, Type II diabetes, strokes, hypertension and cancer (Long and Stevens, 2004). Obesity is also a major concern in Canada, as 26% of Canadian children aged 2-17 are overweight or obese and this level has tripled in the last 25 years (SheilDS, 2005). F&V consumption not only contributes to health by improving the nutritional quality of a diet but by decreasing the caloric density and therefore total caloric intake by an individual; thus playing a role in obesity prevention and weight management (Rolls, Ello-Martin and Tohill, 2006; Thomas et al, 2004).

The number of adult Canadians who know the recommended servings of F&V a day, and the health benefits of eating F&V’s is low (Connolly, 2005). In British Columbia, 64.5% of adults do not meet the recommendations for F&V intake. (BC Ministry of Health, 2004). Seven out of 10 Canadian children aged 4 to 8 do not meet the minimum guideline of five-servings per day (Statistics Canada, 2004). Establishing healthy eating habits in early life may contribute to healthy eating in later life (Holcomb et al, 1998). Thus, interventions focused on childhood can contribute to overall population health (Baxter et al, 1997). The majority of children in developed countries can be reached through elementary schools. Schools have substantive and sustained contact with children over time, making the school an important setting for public health intervention (Fox, Cooper and McKenna, 2004; Veugelers and Fitzgerald, 2005).

Interventions targeting children have been shown to increase fruit and vegetable consumption by .3 to .9 of a serving per day (Knai et al, 2006; French and Stables, 2003). Few studies have provided children with F&V’s as part of an intervention; however those that have, had a significant impact on consumption (Bere, E., et al, 2005; 2006; Liquori, T, & Koch, P., 1998). The Norwegian School Fruit program, which is a subscription program, provided free fruit once a day in combination with an educational program called Fruit and Vegetables Make the Mark and found a .6 of a serving difference in consumption (Bere et al 2006). Children participating in free fruit programs ate significantly more fruit and vegetables than those in ‘subscription’ programs. In turn, those children in subscription programs ate significantly more fruit and vegetables than those children who weren’t enrolled in a program (Bere,
2005). More importantly, Bere, Veierod, Skare and Klepp (2007) have followed children in the program for 3 years and found that the significant effects of their program on fruit and vegetable consumption remained for both girls and boys respectively (.38 and .44 of a portion/day).
Chapter 2 Methods

Methods

Participant Recruitment and Selection

School Parent Advisory Committees (PAC) were required to submit an application to the project coordinator of the program. Schools then received notification that they were accepted to the program which would begin in February 2007. After selection the SFVSP coordinator contacted the school administrators from the selected schools and presented them with information regarding the SFVSP. Each school was required to identify a coordinator to help implement the program. The Provincial Coordinator held a training session with the coordinators at each school. This coordinator was usually a parent from the Parent Advisory Committee (PAC). This training session was done through a PowerPoint presentation and a conference call linking all schools together. The evaluation team contacted the schools (n=51). Information letters and consent forms were distributed to the staff and signed consents were either mailed or faxed back to the evaluation team.

Key provincial stakeholders in the project were also contacted by the evaluation team and were sent information letters and consent forms to return by mail. Ethics approval for this project was obtained from the University of Victoria Human Research Ethics Board.

Evaluation Design

A mixed methods design was used to explore the process of implementation. We used a combination of census (all participants) and purposive sampling (targeted participants). All schools (n=51) completed fax back surveys and bi-weekly product delivery logs. Eight schools were included in a more in-depth interview process. These schools were selected to represent a variety of implementation contexts including varying socio-economic profiles, school type (elementary, middle and high), status (Year I or Year II) and geographical diversity.
**Data Collection**

All data collection methods and sources are outlined and described following. Data collection procedures were constrained by pragmatic considerations within the provincial or school-level context (e.g. timing, funding, school schedules, etc.).

**Fax Back Survey**

A fax back survey was sent to 51 schools to gather information on: stakeholder satisfaction with various components of the SFVSP initiative, the facilitators and barriers to implementation, benefits and drawbacks for the school and their desire to participate again. The PAC Coordinator or Administrator at each school completed the survey, which can be found in Appendix A.

**Focus Groups and Individual Interviews.**

Interview participants were teachers (n=7 schools), administrators (n=8 schools), suppliers and distributors (n = 7), and PAC members (n=8 schools) who were involved in the implementation of the School Fruit and Vegetable Snack Program. School focus groups were scheduled through the school administrator and lunch was provided. Focus groups ranged from two to fifteen people, primarily teachers. In some cases the PAC and Administrators asked to join the focus group instead of the one-to-one interview. The interview schedules were based upon the goals and objectives of the process evaluation and addressed the impact of the program in the school, facilitators and barriers to implementation and evaluation of the overall program and key program components (See Appendix B & C).

**Logs**

PAC members who volunteered to help distribute the fruit and vegetables in the school, used a log to record receipt of the fruit and vegetables, the condition of the product, the returns from the classroom, the distribution of any extra product and commented on any related issues bi-weekly (n=10 potential logs/school). An example of the log is provided in Appendix D.
**Intervention:**

F&V's were delivered to three high schools, one middle school, and 47 elementary schools across the province bi-weekly on Tuesdays and Thursdays for 10 weeks. Parent Advisory Committees identified a school coordinator who organized to have the product delivered to each class. Educational and promotional posters and stickers, which focused on increasing F&V consumption, healthy eating, and hand washing were given to each of the schools to distribute to students and send home to parents. There was no prescribed curriculum intervention, however a teacher manual was distributed to provide support to staff. “Grow BC – A guide to BC’s Agriculture Resources” was also distributed to the school coordinator, which provided facts related to agriculture and the products that were distributed. A provincial coordinator maintained close contact with the stakeholders, school administrator, suppliers and distributors and acted in a trouble-shooting capacity regarding supply issues.

**Timeline**

Focus group, survey and interview data was collected in May and June of 2007. The SFVSP was implemented between February and June 2007 and logs were collected throughout the intervention period.

**Data Analysis**

**Fax Back Survey data**

Quantitative data from the Fax back surveys were entered directly into SPSS 12.0 for statistical analysis. Means, medians and ranges were calculated for all variables and frequency distributions generated for categorical variables. Qualitative data from the surveys was entered directly into Excel, and hand-coded and themed to identify key implementation issues.

**Focus Group and Interview Data**

Audiotapes were transcribed verbatim. Nvivo qualitative software was used to analyze the transcriptions and documents for content and themes (Neumark-Sztainer, 2003). Nvivo also creates a template for organizing data. Data was coded and analyzed for meaning, allowing themes and ideas to
emerge from the focus groups (Russell and Phillips-Miller, 2002). Quotes were used to explain how themes emerged and provide understanding for those themes (Thomas and Nelson, 2001).

**Logs**

PAC logs were entered into Excel. The list of deliveries was compared by hand to the provincial schedule of deliveries to determine fidelity and all school issues were hand coded and themed by a research assistant.
Chapter 3  Key Findings: Fidelity, Satisfaction and Feasibility

Fidelity

The SFVSP had ‘high’ fidelity; the product was delivered as intended to the schools. Twenty-six schools completed logs (range 2 -8 logs submitted) Of 113 logged deliveries there were only three recorded instances where a school received a different product than was planned. There were 60 comments about product quality and 32/60 were positive while 18/60 logs described some aspect of poor quality (e.g. spoilage, dirt, unripe). One school reported being short of product however they also reported that the Provincial Coordinator solved this issue immediately. There were 160 instances of leftover produce logged but this product was not wasted. The excess product was used to feed children or families through after school programs, daycare, events and classes on the next day, 87.5% of the time. Thirteen percent of the time the excess was given to the staff.

Satisfaction

Teachers, administrators, parental advisory committees (PAC), and suppliers and distributors were highly satisfied with the SFVSP. 100% of the teachers, administrators, PAC’s and suppliers and distributors who participated in an interview were in favour of continuing with the program.

Ratings of satisfaction with the components of SFVSP were similarly high on the fax back surveys that the school coordinators or administrators completed (n=50). See Figures 1 – 7 for detailed results. Following are the highlights:

- 88% were satisfied or extremely satisfied with the application and intake process
- 92% were satisfied or extremely satisfied with the financial resources provided to support implementation
- 88% were satisfied or extremely satisfied with the print resources.
• 69% were satisfied with the support provided by the BC Agriculture in the Classroom team (BCAC). This result may reflect a lack of understanding by the respondents as the qualitative feedback identified the Provincial Coordinator (a member of the BCAC team) as a key support.

• 88% were satisfied or very satisfied with the PAC coordination.

• 93% were satisfied or extremely satisfied with the distribution of the food within the school.

• 96% were satisfied or extremely satisfied with the distribution of the food to the school.

Figure 1. Level of Satisfaction With Application & Intake Process
Responses from the focus groups and one on one interviews also highlighted the high level of satisfaction across stakeholder groups. A selection of responses is shown in Table 1.

**School stakeholders**

“We would like to see this continued on an ongoing basis.” **Administrator**

“It is a good program, the kids like it a lot, they are disappointed when it is not here.” **PAC**

“I think it is great, my kids are so excited about it”. **Teacher**

Table 1. Quotes related to satisfaction with the SFVSP displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m finding that most of the kids ask for seconds, and they appreciate it, like today, is there any leftover food, can I have another apple?</td>
<td>In our particular school, there was a group of students who took the food and threw it outside of the building or in the hallways.</td>
<td>The teachers are key, absolutely, if they weren’t supportive of it, it would be very difficult.</td>
</tr>
<tr>
<td>What is the goal of the program, just get the kids a free snack, is that the goal?</td>
<td>We really love this; we would like to see this continued on an ongoing basis.</td>
<td>It’s fun to deliver because the kids say yeah what do we have today?</td>
</tr>
<tr>
<td>It is going well, the kids really enjoy it. There seems to be more discussion around fruits and vegetables now.</td>
<td></td>
<td>They’re disappointed it’s not every week, and the teachers have been amazing because we’ve asked them to do so many things, and now we’re asking them to take 5 or 10 minutes out of their day and add this and they’re really cooperative so that’s excellent.</td>
</tr>
</tbody>
</table>

A variety of responses were expressed, which included: wanting to continue the program, positive feedback and buy-in from teachers and students. However, it should be noted that some schools were not aware of the goals of the program; they indicated they thought it was just to provide a free snack.
**Suppliers and Distributors**

The Suppliers and Distributors were highly satisfied with the program and all of them indicated they would like to be involved in the program again.

“It’s a wonderful program, I love being a part of it, and hope we can be part of it again next year.”

“Our company takes pride in being part of this program.”

**Feasibility: School Implementation**

Implementation facilitators and barriers were addressed in both the fax back survey and the focus group interviews. Themes and the frequency of the comments that relate to these themes on the survey are presented in Tables 2 and 3. Detailed information from the focus groups are presented following and eight key implementation themes are represented.
Table 2. Survey responses – What factors have assisted your school in implementing the SFVSP?

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
<th>Sample Quote(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources: Fridge/kitchen facility/bins/print resources</td>
<td>23</td>
<td>“The fridge that was provided is wonderful…it is critical to have proper food storage.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“…necessary direction, funds and resources required to make the program a success.”</td>
</tr>
<tr>
<td>PAC leadership/support/coordination</td>
<td>21</td>
<td>“Our PAC has been a valuable tool in the implementation.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“PAC President agreed to get it started.”</td>
</tr>
<tr>
<td>Efficiency of delivery to school</td>
<td>14</td>
<td>“Delivery right to school…”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Excellent delivery of produce”</td>
</tr>
<tr>
<td>Free/low cost/financially supported</td>
<td>12</td>
<td>“It’s free, delivered and we get paid to do it.”</td>
</tr>
<tr>
<td>Teacher/School staff/district/administration support and involvement</td>
<td>12</td>
<td>“The keen interest of all our school community.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Willingness of staff to try it.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Enthusiastic teacher participation.”</td>
</tr>
<tr>
<td>Student Support</td>
<td>10</td>
<td>“…a class of students who took this on as a project.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Children enjoy it.”</td>
</tr>
<tr>
<td>Parental support/volunteers</td>
<td>9</td>
<td>“…tremendous parental support.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“parent with Food Safe overseeing distribution…”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Parents organizing and running the program.”</td>
</tr>
<tr>
<td>Support from SFVSP staff &amp; Ann Britton</td>
<td>7</td>
<td>“Anne was very helpful to us, her support and enthusiasm was appreciated.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Good communication.”</td>
</tr>
<tr>
<td>Easy to organize and administer/well laid out</td>
<td>5</td>
<td>“It was a well laid out and supported process.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Straightforwardness of everything.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The sign-up and start-up was simple, user-friendly and free!”</td>
</tr>
<tr>
<td>In line with school goals/beliefs/partnering programs</td>
<td>5</td>
<td>“…having a school goal of promoting health, nutrition and fitness…”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“We are a “junk” free school.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Healthy Buddies program.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The tie-in to our other programs of this nature.”</td>
</tr>
<tr>
<td>Good quality/amount of fruits and vegetables provided</td>
<td>4</td>
<td>“…fruits and vegetables of a very high quality.”</td>
</tr>
<tr>
<td>Low SES school in need of program like this</td>
<td>1</td>
<td>“Need for the this type of program in low socio-economic area that is also a food providing region.”</td>
</tr>
<tr>
<td>Theme</td>
<td>Frequency</td>
<td>Sample Quote(s)</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-----------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Difficulty of finding consistent volunteers (with Food Safe)</td>
<td>11</td>
<td>“…difficult to get parents who are available during the day.” “Initial difficulty finding a volunteer with Food Safe.” “Irregular PAC support.”</td>
</tr>
<tr>
<td>Inadequate storage space/Bins too large/Fridge not large enough</td>
<td>7</td>
<td>“We bought our bins as we had trouble storing the ones you sent us (too large for K-4 classrooms).” “Getting a fridge.” “Space to store the class snack bins.”</td>
</tr>
<tr>
<td>Difficulty of coordinating in-school delivery/removal of in-school coordinator</td>
<td>6</td>
<td>“Coordinating with the PAC for intake and class distribution.” “When the financial assistance to pay for a coordinator was removed. Staff members had to jump in and give up on some part of their academic program.”</td>
</tr>
<tr>
<td>Delay in implementing program/regression from last year</td>
<td>5</td>
<td>“Too long a wait to find out if and when the program will start and also if we would be the participating school.” “The delay in implementing the program this year because of the change in format…” “Starting mid year did not allow the same momentum to build.”</td>
</tr>
<tr>
<td>Inconsistency of delivery/not coming at right times</td>
<td>3</td>
<td>“The fruit and veggies do not always come during the stipulated times.” “…takes time to count and disperse product.”</td>
</tr>
<tr>
<td>Time constraints</td>
<td>3</td>
<td>“…”</td>
</tr>
<tr>
<td>Difficult start</td>
<td>3</td>
<td>“Initial skepticism on the part of some community members.” “Initial scheduling of the program was a minor concern that has been solved.”</td>
</tr>
<tr>
<td>Some produce moldy or not clean</td>
<td>3</td>
<td>“…apples are not clean and some veggies (tomatoes) were moldy.” “We do not have any fridge to contain the items for the second day, so mold happens.”</td>
</tr>
<tr>
<td>Lack of variety of F &amp; V/ too much produce</td>
<td>3</td>
<td>“Children would have preferred more variety.” “…too many tomatoes too often.”</td>
</tr>
<tr>
<td>Disruption of classes</td>
<td>2</td>
<td>“…needed to use an entire class of students to complete the process efficiently, which was somewhat of a disruption to the particular course.”</td>
</tr>
<tr>
<td>No eating allowed in some classrooms (high school)</td>
<td>2</td>
<td>“No eating is allowed in Science classrooms, gym and shops.”</td>
</tr>
<tr>
<td>F&amp;V only available every 2 weeks</td>
<td>1</td>
<td>“Availability only every other week.”</td>
</tr>
<tr>
<td>Some students abused food privileges</td>
<td>1</td>
<td>“A handful of students who took the food, threw it on floors, walls and in toilets.”</td>
</tr>
<tr>
<td>Bad weather (food not delivered)</td>
<td>1</td>
<td>“No business days due to bad weather.”</td>
</tr>
<tr>
<td>Competing with other schools in district for a spot in the program</td>
<td>1</td>
<td>“Having to compete for spot on roster.”</td>
</tr>
<tr>
<td>Prader Willie child in school</td>
<td>1</td>
<td>“…distribution and storage of the fruit…had to be carefully monitored.”</td>
</tr>
</tbody>
</table>
**Focus Group Theme 1: Delivery**

Delivery of the F&V’s to the schools, as well as to the classrooms, emerged as a prominent theme from participants. A sample of quotes are displayed in Table 4 and following.

*The food is delivered right to the school; it makes it easy. Administrator*

*We opted to do the pick up, but if it could be delivered next year, that would be awesome. PAC*

*Having it delivered to the classroom is a facilitator. Teacher*

Table 4. Quotes related to the Delivery theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are some days that things don’t come the day they’re expected.</td>
<td>The fact that it is delivered right to the school.</td>
<td>This year we have a consistent delivery process; a private delivery company picks up the food in [city] at Save-On and delivers it to the school; that has helped us.</td>
</tr>
<tr>
<td>Having the bins for the division and having someone bring them to the classrooms made it easy.</td>
<td>Delivery is consistent and on time.</td>
<td>It’s a good system of delivery.</td>
</tr>
<tr>
<td>It was supposed to be Tuesday’s and Thursday’s this year and you would not have an interruption with days or days off, things weren’t coming until Wednesday so it wasn’t consistent that way.</td>
<td>I liked how the food is made available and delivered directly to the school.</td>
<td>If we could just have it delivered that would be better.</td>
</tr>
</tbody>
</table>

Having the F&V’s delivered both to the school and to the classrooms clearly helped with the ease of implementation of the program. The blue bins provided an easy way to distribute the F&V’s to the classrooms. Delivery of the F&V’s to the school was expressed as a facilitator to the implementation of the program. Those schools that did not have the FV’s delivered to the schools expressed that it would help the implementation of the program to have them directly delivered to the school. The consistency of delivery of the F&V’s to the classroom appeared to be problematic in some schools while not at others.
Focus Group Theme 2: Parent Advisory Committee

The PAC role was mentioned by all ten of the teacher focus groups, administrators, and PAC’s as being a facilitator to the implementation of the program. The following quotes and Table 5 express this theme. The PAC school coordinators were introduced in Phase II to enhance sustainability and long-term economic feasibility and the data illustrates that for the most part this approach was successful. It was evident that this varied by school however and that the key challenge in this approach related to recruiting volunteers.

*We have consistent PAC members and they know what they are doing.* Administrator

*We are not always 100% sure that a PAC [parent] will show.* PAC

*The parents are crucial.* Teacher

Table 5. Quotes from the PAC - Facilitation theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>If we didn’t have our volunteers here to do it in the morning, that would be a big challenge, so the way we’ve got it set up here is really good.</em></td>
<td><em>It makes it easy that the volunteer is able to take care of the distribution of the food.</em></td>
<td><em>It helped to get paid to do this, and you know honestly I am not sure I could have done it without getting paid to do it.</em></td>
</tr>
<tr>
<td><em>We couldn’t have done it if it was up to the teachers, we don’t have that kind of time.</em></td>
<td><em>It’s the way to go, but I think that our PAC is above average, you won’t get this everywhere, we have the right people here.</em></td>
<td><em>I didn’t even know there was training for us.</em></td>
</tr>
<tr>
<td><em>The PAC is vital, no one else has the time to be doing that, unless you had a club of some sort, had student leaders doing it or something.</em></td>
<td><em>Without the PAC this would not fly, teachers and administrators do not have the time.</em></td>
<td><em>I thought the training was good; the PowerPoint presentation was easy to follow.</em></td>
</tr>
</tbody>
</table>
Clearly all interviewed stakeholders involved in the program felt that having the PAC Coordinator was essential for the program to be implemented successfully. Staff felt that the program could not be run without having an outside person to do the job. Some PAC members indicated that they did not receive training that was given at the beginning of the program.

Participants also indicated that there were some challenges surrounding the use of the PAC members as the Coordinators. The following quotes and Table 6 further explore comments regarding this theme.

_We have to twist arms to get PAC parents to come, our old in-school coordinator [from the pilot], does it when a PAC parent doesn’t show up. I think you need to let the school choose if they use the PAC or an ISC._ **Administrator**

_The timing of when stuff was coming in because of the scheduling, I can’t stay at the school all day, and it doesn’t always come at the same time._ **PAC**

_Our parent volunteer is not very reliable, last year there was some money to pay someone, and this year there isn’t any money, and sometimes our PAC person doesn’t show up._ **Teacher**

Table 6. Quotes from the PAC Theme - Challenges displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even though there are materials sent to us they are not getting to us because last year we had a CUPE person that was paid to do this, now it is hit and miss if it gets here, and sometimes the food in the school, there is just no one to give it out. It doesn’t really work for schools that don’t have a really strong PAC, then they don’t get the program, so that’s not really fair.</td>
<td>Finding volunteers to handle the tasks is an issue.</td>
<td>Just getting volunteers, but that’s our problem not yours.</td>
</tr>
<tr>
<td>Finding parental support because they are working is a problem.</td>
<td>It’s hard to get the volunteers.</td>
<td></td>
</tr>
</tbody>
</table>

-29-
It is a bit of a concern now that it is the PAC’s program because last year it was ours, and the fridge was open, but this year we can’t let the kids take the extras because we don’t have access to the PAC fridge because they lock it.

The only thing that could help improve the implementation of the program is more availability of volunteers.

We have learned that you don’t need a lot of people to help you; you only need a couple of people. It’s not hard to do, if you have lack of participation from parents, it happens a lot in schools like this, we just found it’s easy and only two people really need to do it.

The majority of challenges related to the PAC were surrounding the lack of consistency of PAC members being at the school on a regular basis and problems with recruiting PAC members to volunteer for the program.

**Focus Group Theme 3: Exposure to Fruit and Vegetables (observing the benefits)**

Stakeholders involved in the program mentioned that the children at their schools were introduced to new foods that they had never tried before. The following quotes and Table 7 further explore comments regarding this theme.

* A number of students appreciated the healthy, good food, there was no cost, everybody could enjoy it, there was no stigma attached to the program, as everyone had equal access to the fruits and vegetables, the food was nutritious. **Administrator**

* Kids don’t get their fruits and vegetables at home, or they’re very picky on what they want. So here, they’re given, it’s provided, they can have it or they don’t have to have it, and it’s just more there, and they can, if it’s well presented then they’re gonna take it. So when it’s available they’ll take it. **PAC**

* I like it because it allows some children to try certain vegetables. It gives them that opportunity, I find they can try it, some of them actually do change their minds, actually try it and then love it, so it’s a good program. **Teacher**
Table 7. Quotes from the Exposure theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is really wonderful to have food available in the school and healthy food. Today I have two kids who forgot their lunch and I kept back 3 or 4 of the apples and they're gone. So, I know that people who need it are eating it and they're getting good stuff; that is a positive. The kids, they love the food, it's just being able to have access to it.</td>
<td>Low socio-economic status in this area, and kids might not have the opportunity to get fruits and vegetables in their diets.</td>
<td>Some of these kids don't get fruit and veggies, and it's shocking! You know, in this day and age when they're so readily available that they don't get them, so it exposes them to it as well.</td>
</tr>
<tr>
<td>I think it’s definitely for a few of them, exposed them to maybe something they haven’t tried before.</td>
<td>There are really only benefits; there is exposure to a variety of fruits and vegetables that many of the students may never have had.</td>
<td>I think that part of learning about fruits and vegetables is that they come this way. They don’t come cut up like you get ‘em at home.</td>
</tr>
<tr>
<td>There is positive exposure to different types of food.</td>
<td>The kids are getting stuff they don’t normally get to have.</td>
<td></td>
</tr>
</tbody>
</table>

It is clear that teachers, administrators, and PAC’s perceived the program was beneficial for introducing students to F&V’s that they may not otherwise try. The number of students who had not tried the F&V’s that were provided in this program surprised many staff. Lastly, participants expressed the need for the program in their communities for reasons based on poverty rates, lack of access to quality foods, and lack of nutritious foods being brought to school. This was a reoccurring theme throughout the focus group and interview sessions. Participants felt that without the school program, children would consume less F&V’s.

**Focus Group Theme 4: Alignment with values and school approaches**

Stakeholders involved in the program commented on the fit between what was going on in the school, the values and activities of the teachers and the program. The following quotes illustrate this theme.

*The food has come in a timely fashion with the school, because we have a whole school approach to health right now. Administrator*
Getting the teachers to accept the food in the classrooms, for example, science classes don’t allow students to eat in class, towards the end, they saw how much the students appreciated the food and allowed them to eat in class. High school rules are a bit of a challenge. PAC

*We turn it into a lesson, turn it into a math lesson and we talked about a couple of times the kids wanted to know where it came from.* Teacher

**Focus Group Theme 5: Resources**

School stakeholders were asked about improving the program and they requested additional educational materials that could accompany the delivery of F&V’s. The following quotes and Table 8 reflect the comments captured for this theme.

*It would be good to have a nutrition education package around some of the fruits and vegetables, a little blurb that says this fruit or vegetable gives you these vitamins or minerals, and here’s how it benefits you. Also, maybe some information on organic versus non-organic fruits and vegetables.* Administrator

*We could have more resources materials provided to us that would be helpful to us.* PAC

*Last year there was a lot more educational material attached to the program, this year that was really lacking.* Teacher
Table 8. Quotes from the Resources theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The posters are great.</td>
<td>They provided us with lots of resources.</td>
<td>This book is wonderful [Grow BC], but I notice that many of the things that we’ve been offered aren’t in this book.</td>
</tr>
<tr>
<td>I’ve been here for two years, and I’ve never seen the manuals you are talking about.</td>
<td>It would be nice to have an interactive program for kids online. You could have meal plans, match nutrients to foods, different activities to get them engaged.</td>
<td>If there’s some type of visual thing that we could show them, like I know you had that wonderful PowerPoint, but if we had a DVD or something.</td>
</tr>
<tr>
<td>We just got one Grow BC book, which we turned into a binder, and it was out on the table and no one was using it.</td>
<td>Have information come with the program that describes the veggie and fruit and provides info about where it has been grown, nutritional benefits, etc.</td>
<td>It would be really handy if we could possibly get a write up on what each of the particular things, so that maybe the teacher could have something to teach them in class, like what kind of apple it is, and where it’s from and what the benefits are.</td>
</tr>
</tbody>
</table>

Participants liked the posters, and bins that were provided. There were new resources this year such as the Grow BC book, as well as last years teachers manual. However, few teachers and other staff in the focus group interviews knew these resources existed and many were not using them. Thus, they felt that materials provided to the teachers could be improved, by providing things such as nutritional facts, or a video or song that could be used in the classroom. Moreover, providing information to the teachers periodically throughout the year would be beneficial in mitigating teachers feeling overwhelmed when a lot of materials arrive at once. The survey responses shown in Table 9 provide further support for the findings from the focus groups.
Table 9. Survey Responses - Comments on the resources (financial or print) and/or support provided

<table>
<thead>
<tr>
<th>Category</th>
<th>Theme</th>
<th>Freq.</th>
<th>Quote(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Comments</strong></td>
<td>Excellent/great/very positive/good (in general)</td>
<td>22</td>
<td>“…it has all been VERY positive.” “Support was excellent.” “Resources were excellent, useful and available…”</td>
</tr>
<tr>
<td><strong>Print Resources</strong></td>
<td>Print resources are good/informative/helpful</td>
<td>12</td>
<td>“I read mine to my class, very informative.” “Teachers have used product and print to do wonderful lessons and reflections – nutrition, math, writing.” “Put up a bulletin board and signs in every washroom.” “Good connections with curriculum.” “Awesome posters …”</td>
</tr>
<tr>
<td>Teaching resources were underused/would like more copies</td>
<td>4</td>
<td></td>
<td>“Since there was one copy per school…it hasn’t been used a lot …because they … share it.” “Each teacher would have liked a copy of “Grow BC”…” “Other than posters not much has been used.”</td>
</tr>
<tr>
<td>Informational resources less than satisfactory/insufficient</td>
<td>2</td>
<td></td>
<td>“Info provided was good to give some knowledge, but when real problems occur, it does not address it.”</td>
</tr>
<tr>
<td>Pamphlets and posters were undone</td>
<td>1</td>
<td></td>
<td>“The resources were good, but the posters, pamphlets, etc., were probably overdone for our situation.”</td>
</tr>
<tr>
<td>Have not received any teacher resources</td>
<td>1</td>
<td></td>
<td>“We have not received teacher resources.”</td>
</tr>
<tr>
<td><strong>Financial Resources/Support</strong></td>
<td>Financial support was helpful</td>
<td>9</td>
<td>“The free food, free delivery, free storage devices (fridge, bins) were greatly appreciated by volunteers, PAC, staff and majority of students.” “The $750 was a boost to our healthy eating focus.” “Financial support was adequate.”</td>
</tr>
<tr>
<td>Financial changes from last year not positive</td>
<td>1</td>
<td></td>
<td>“The financial changes from original implementation are not ones that I see as positive. Moving to expect volunteers to organize the program will create pressure on the school…A school staff member is able to do stronger promotion.”</td>
</tr>
<tr>
<td><strong>Administrative Support/Communication</strong></td>
<td>Good communication/support from Anne and SFVSP staff</td>
<td>4</td>
<td>“Lots of good support from Anne B., head of program.”</td>
</tr>
<tr>
<td>Poor communication with courier company</td>
<td>1</td>
<td></td>
<td>“…the courier company was impossible to contact with when our produce was delivered a day late a couple of times.”</td>
</tr>
<tr>
<td><strong>Infrastructure Resources</strong></td>
<td>Refrigerator was great</td>
<td>8</td>
<td>“The refrigerator has certainly assisted.”</td>
</tr>
<tr>
<td>Not enough room for fridge</td>
<td>1</td>
<td></td>
<td>“…not enough room for three fridges.”</td>
</tr>
</tbody>
</table>
Focus Group Theme 6: Program Operations

The program operations theme is about the planning and logistics of the program, and includes issues such as quality, quantity, and waste, among other operational elements of the program. These were reflected in all of the focus groups and interviews (see Table 10).

*The difficulty is that in a high school there are certain classes that do not allow eating, like science labs, metal, wood, auto tech shops, library, etc. In these classrooms, the program is not conducive. Administrator*

*I think that the only thing that was difficult was the fact that we didn’t really have an appropriate space to be doing it because we kept getting chased out of the music room if there was a class in there, so that was just a little inconvenient. PAC*

*All of the things they’ve brought in so far have been of really fresh quality. Teacher*

Table 10. Quotes from the Program Operations theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think it is difficult for staff to know that the products are local BC products, because it doesn’t come in the boxes that they’re delivered in, but the teachers are not aware that they are local BC products.</td>
<td>The program was so new, we were not sure what to expect. We have to fit it into our busy day; it would have been nice to have information on how to fit this into our busy day.</td>
<td>The new refrigerator is fantastic, so now we have room to store the food, and therefore we deliver better quality products, for example, we delivered the cucumbers cold and crisp.</td>
</tr>
<tr>
<td>We always get too much, there are always kids away, so we have a lot of fruit leftover.</td>
<td>Refrigeration was key.</td>
<td>Once we solved the issue of some of the classes can’t have food in them, because it was something new, we had to find positives for [the teachers].</td>
</tr>
<tr>
<td>We would like to see more different varieties.</td>
<td>They [the SFVSP team] have been great. Any questions or issues were resolved right away.</td>
<td>One thing I noticed is that the [local] employees at Save-On Foods knew nothing about the program when I started going there. Everyone was like, we don’t have a program like that, we signed up, so it took weeks before they knew what was going on.</td>
</tr>
</tbody>
</table>
When asked what helped with the implementation of the program, schools stated that having good quality fresh produce enhanced both the implementation and acceptance of the program. There were limited comments related to poor quality FV’s. Staff commented on the benefits of the fridge that was provided to many of the schools, this enabled better quality FV’s and provided storage. Some schools however indicated that more storage space was needed. Waste related to packaging of some of the F&V’s and that occurred because produce was thrown out (because of quantity or portion size) was an issue for many of the teachers. However, the teachers of the younger grades enjoyed the ease of the pre-packaged F&V’s, and they felt the pre-packaged items produced less waste of uneaten F&V’s. Teachers also indicated that the pre-packaged snacks were seen as a treat and the children were more excited to eat them.

**Focus Group Theme 7: Benefits**

A theme that emerged from the focus groups and interviews was that there were many benefits to children and people associated with the program. Table 11 and the quotes below reflect this theme.

*The nutrition boost for them during the day is beneficial.* **Administrator**

_We’ve had parents ask too when we got the little apples in the bags and the cucumbers in the packages where we got them, where can we buy them? Because we haven’t seen them. There are actually the mini cucumbers in the store, so there’s been lots of discussion around getting those at home. **PAC**_

_It’s been great in my class; it’s changed a lot of attitudes that kids have towards cucumbers. They thought they actually tasted great, I think the kids learned a lot, and changed their attitudes towards fruits and vegetables. **Teacher**_
Table 11. Quotes from the Benefits theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think some kids who maybe weren’t getting any vegetables are eating</td>
<td>I think that it increases academic performance and reduces the incidents of negative behaviour….</td>
<td>The mini cucumbers were a real hit, my daughters would ask me for then in their lunch now, and we’ve had other kids say the same thing, it’s kinda neat.</td>
</tr>
<tr>
<td>vegetables, it improves their nutrition, it improves their eating habits.</td>
<td></td>
<td>It fills a void in our community.</td>
</tr>
<tr>
<td>I think it is a good way try to influence the shopping habits of the</td>
<td>The program is being very successful; they ask different questions about fruits and vegetables, they are getting engaged in it.</td>
<td></td>
</tr>
<tr>
<td>families because they go home ranting and raving about how good the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fresh fruits and vegetables were, then that helps.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It made me more aware of how much fruits and vegetables the kids will</td>
<td>It is great that local BC produce is promoted.</td>
<td>This year the kids are willing to take a risk and try new foods.</td>
</tr>
<tr>
<td>eat if it’s available, you know they just gobble ‘em down.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Participants stated that there were many benefits to the program such as providing those that needed food with an extra snack, as well as providing a nutritional boost to students during the day, and providing them with FV’s that they would not otherwise get. It increased knowledge and awareness of FV’s as well. This was supported in the fax back surveys that described many positive benefits of the program (see Table 12).
Table 12. Survey Responses – Describing any benefits of participating in the SFVSP.

<table>
<thead>
<tr>
<th>Benefits:</th>
<th>Frequency</th>
<th>Quote(s)</th>
</tr>
</thead>
</table>
| Improved eating habits of students/changing   | 14        | “Students are bringing more healthy meals…”  
“We’ve seen a dramatic increase in overall consumption of fruits and vegetables (kids bringing them from home, etc.)…it’s seen as much more acceptable to have fruit and veggies for snacks.”  
“It’s having an impact on food choice being made by children.” |
| Students trying new foods                      | 14        | “The children have tried many vegetables they may not otherwise have tried.”  
“Great learning for students to try and eat healthier snacks.”  
“More children eating healthy food, some trying an item for the first time.” |
| Increased school-wide and parental awareness   | 13        | “The conversation generated about fruit and vegetables during snack time is very positive.”  
“Staff is also more aware of healthy choices.”  
“…some parents have found that the entire family is more receptive to eating healthier foods.” |
| of healthy eating.                              |           |                                                                                                                                                                                                           |
| Increased awareness about local produce        | 1         | “They liked the BC product better. This awareness was impressive and shows the goal of promoting BC agriculture is met through the program.” |
| Helps students in need of food                 | 1         | “One student indicated to me that the fresh fruit is a treat because he does not have access to it at home.”                                                                                           |
| Complements other health initiatives/goals in  | 6         | “The program really helped to further emphasize the healthy living philosophy that we are building in our school.”  
“Works well in conjunction with the Healthy Buddy program.”  
“…it ties into the milk program and Action Schools very nicely which we have build into the school this year.”  
“Excellent structure for our School Improvement Plan.” |
| school                                                                                        |           |                                                                                                                                                                                                           |
| Students enjoy everything, nothing wasted      | 7         | “Students ask for the leftovers.”  
“…students look forward to each delivery, and eat all fruits and vegetables provided.”  
“Very few students refuse to eat the fruit or veggies offered.” |
Focus Group Theme 8: Changes

Participants provided feedback on changes that they would like to see occur in the program in future years. The following quotes and Table 13 provide excerpts on the theme of ‘changes’.

You could also increase the frequency and have it come weekly because the kids always ask for it. **Administrator**

Can we plan the days differently, know in advance because I got a call asking because one day was a Pro-D day and if they could still deliver on the Monday and we arranged to have people here for it and everything, and it never showed up til the Tuesday still. **PAC**

I think we should start a compost program with the cores and the waste. **Teacher**

Table 13. Quotes from the Changes theme displayed by stakeholder

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Administrators</th>
<th>PACs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think we are missing the point of the program here, because I didn’t know they were from BC, it was just like great grab an apple, have a good recess.</td>
<td>It would be nice to have more fruit, we received cucumbers three times and tomatoes twice.</td>
<td>Instead of having the program twice every second week, it would be better to have it come once each week.</td>
</tr>
<tr>
<td>The packaging is a little excessive, as far as environmentally friendly, like the apples, so the downside is the plastic and recycling and stuff like that.</td>
<td>Living in the [region] there is great awareness around garbage, plastic, and chemicals in foods, so I caution the use of plastic packaging. The kids ask why are we getting fruit in plastic.</td>
<td>We wish we could have it every day.</td>
</tr>
<tr>
<td>Maybe to help the program continue at the schools that have it now you could say if those schools that have it now want to keep it they need to come up with X amount of dollars.</td>
<td>The packages apples, it was neat, the packaging and the kids saw it as a treat because it was packaged, maybe more of this.</td>
<td>It would be good to find a way to involve the students more, student leaders helping out.</td>
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</table>

Comments indicate that there were sometimes extra food leftover and the quantity could be reduced, however other schools enjoyed the leftovers and used them (this was supported by the logs), whereas other schools reported never having any leftovers. Participants suggested that increasing the variety of
F&V's would be beneficial to the program. Teachers, administrators, and ISC’s feel that different F&V's should be provided in the same week, and that too many weeks of one product diminish children's interest in the product. Some schools indicated that they would like to see an increase in the frequency of the program, or change the structure of the program from twice every two weeks to once every week.

**Feasibility: Suppliers and Distributors (S&D's)**

The following is a discussion of the implementation issues, barriers, and facilitators that the suppliers and distributors identified through their involvement in the SFVSP. Interviews were conducted with all seven suppliers and distributors involved in the program. Key themes and illustrative quotes are displayed following.

**Supplier and Distributor Theme: Benefit for Business**

The S&D’s identified the benefits that the program can have for their business.

“*All business is good for the company, this is a tremendous growth opportunity, as it is for the other suppliers involved.*”

“*Great to get the company name out, exposure is great for business.*”

“*There is huge potential for small businesses.*”

“*[Company name] are big players in this. We might not normally get a chance to work with companies like this, but now we’re both benefiting. We need their help for the distribution of our products.*”

**Supplier and Distributor Theme: Benefit for Health and Agriculture**

The S&D’s identified the benefits that the program can have for both the health and agriculture sectors.

“*With the BC agriculture sticker on their fruit, people know they are supporting their local industries, it’s a win-win situation. It supports BC agriculture.*”
“We are committed to project work on child health. This is an opportunity for us to participate in and support an initiative that is beneficial.”

“The kids are going home and going to the grocery stores with their parents and wanting them to buy what they’re eating in the program. We are happy that organics are being connected directly to the health of the consumers.”

“It’s great news as a farmer for long term agriculture.”

Supplier and Distributor Theme: Program Operation

The S&D’s were pleased with the way that the program was organized, however there are some challenges associated with the program. The following sub themes and quotes highlight the challenges and benefits of the program operation and management.

Supplier and Distributor Sub-Theme: Organization

S&D’s were pleased with the way the program was organized.

“The program was upfront, price established, flexible with the product, was able to work with a broader spectrum of fruit.”

“There haven’t been any challenges. We’ve been doing this for three years now. This has been an opportunity, as part of the steering committee to discuss the potential challenges and mitigate them before they occur.”

“There are always day to day challenges, like in the delivery and pick-up, but these are minor and easily rectified.”

“It has given me insight into how difficult it is to organize a large number of people. To think about the different growers that are coordinating with [store] and even just within [company name] many people think this is simple, they get their fruit when they want it, but it’s a very complicated process.”
Supplier and Distributor Sub-Theme: Supply

S&D’s identified that one of the challenges associated with the program is timing of when the FV’s are needed, and supplying large volumes of product.

“There are challenges because the fruit and vegetable program doesn’t happen everyday, it causes a jump in business every two weeks, but them nothing in between.”

“The biggest challenge has been instead of the program allowing us to supply a little product week or every second week, they give us a huge order all in one week. It would be better if it wasn’t all bulk in one week.”

“In the future there may be challenges in that some of the volumes required will be substantial, supplying large volumes in one or two large orders may be a production problem. Growers will have problems meeting the demands. Rather than carry one product per week, it would be better to carry four products per week, from the production side, more cycles with smaller more consistent volumes is better.”

Supplier and Distributor Sub-Theme: Planning

Planning for the future potential expansion of the program was identified as a planning issue related to growth and crop production.

“Not knowing how much of the crop should be diverted to the SFVSP for example you have 12 schools, but that may change to 25, the lack of lead time to the extent of the program was a challenge.”

“They have a lot of fruit available, so as long as they have notice, they should be able to provide it to the school program.”

Supplier and Distributor Sub-Theme: Communication

Communication was a theme that was brought up in the S&D interviews.
“More reinforcement in communication was exemplified.’

“We need to make sure that we are a string in the communications loop. We need to be efficient in letting all the players know what’s happening. We need to proactively communicate, we have already been doing most of this stuff.”

“The communication has been good so far.”

“The people that I’ve dealt with at the SFVSP have been outstanding.”

All S&D’s commented on the lessons they have learned by being involved in the program.

“I’ve also learned that we need to do what it takes to keep the prices low.”

“Products that don’t have to be cut up work better in the schools.”

“Learning the serving sizes for kids, this will be helpful in the future from a marketing standpoint.”

Supplier and Distributor Theme: Program Expansion

S&D’s commented that they hope the program continues and expands.

“I hope the government sticks to it, I hope that the government isn’t just doing it for quick recognition on the political side, I hope this government keeps it going.”

“Rolling it out to more schools is a good thing.”

“We are excited to see the program expanding, we are pumped that it is growing and covering more kids, hopefully the program will keep going and growing.”

“We just put in a package to be part of the program again next year.”

Feedback from High Schools

Although participating high schools and middle schools were satisfied with the SFVSP there were three key issues raised by participants that were unique to the high schools that participated: 1) inappropriate
use of the food by students when access wasn't monitored, 2) delivery of the fruit and vegetables to class areas where there were restrictions on food consumption (e.g. the gymnasium) and 3) the unrealized opportunity to engage the student leadership program in coordination and delivery in the high school setting.
Chapter 4 Summary and Recommendations

Summary

The PAC facilitated SVFSP program was well accepted, easy to implement and had a support infrastructure that was responsive to project implementation issues. The positive school and stakeholder response to the program was similar to the pilot phase and the schools and business stakeholders were universally enthusiastic about the program and its continuation.

The findings from the survey, logs, focus group and one-on-one interviews reflected similar themes. School level stakeholders continually emphasized the importance of regular, simple delivery of fruit and vegetables that was supported by a designated person in their school and facilitated by a provincial coordinator. Key implementation facilitators included: the resources provided (funding, fridges, written material) the Parent Advisory Committee coordination, the quality of the produce, the observed changes and benefits for children, the alignment with school and teacher values and approaches, the willingness of the school staff to make it work and support from the Provincial Coordinator. Key implementation challenges were: difficulty identifying volunteers to provide consistent coordination, lack of storage space for the produce bins, coordination between school staff and PAC for delivery and lack of knowledge about the resources provided. Despite some of these reported challenges, 100% of the evaluation participants wanted the program to continue.

There were three key areas where the feedback varied: 1) schools that participated in the pilot found the new model and the intake process more challenging, 2) high schools faced unique challenges, 3) knowledge of and satisfaction with the written resource materials varied widely across schools.

The positive value of the program for children, the health of the community and the agricultural sector, efficiency of operations, good communication and the ability to plan for large volumes of produce delivery were also important to the business stakeholders.
Key Recommendations for the Future

- Maintain a designated coordinator at the school and provincial level, as these positions were key to implementation success.

- Expand educational materials as support for teachers to use in the classroom if they wish.

- Improve the mechanism of disseminating the educational materials to the teachers.

- Continue providing incentives to the PAC’s to promote participation in the program.

- Transfer the knowledge of how the different structure and organization of high school life was accommodated in schools.
References


Lang, T., & Rayner, G. (Eds.). (nd). Why health is the key to the future of food and farming. Health Development Agency.


Appendix A. Fax Back Survey

YEAR END SCHOOL FRUIT & VEGETABLE SNACK PROGRAM
FEED BACK REPORT & FAX BACK

School Name & SD#: ____________________________
Completed by: _________________________________
Date: ________________________________

What Factors have assisted your school in implementing the School Fruit & Vegetable Snack Program?
________________________________________________________________________
________________________________________________________________________

What were the barriers or challenges to implementing the School Fruit & Vegetable Snack Program?
________________________________________________________________________
________________________________________________________________________

Please provide any comments on the resources (Financial or Print) and/or support provided.
________________________________________________________________________
________________________________________________________________________

Describe any benefits and/or drawbacks for your school as a result of participating in the School Fruit & Vegetable Snack Program.
________________________________________________________________________
________________________________________________________________________

Please describe your overall assessment of the School Fruit & Vegetable Snack program in your school.
________________________________________________________________________
________________________________________________________________________

Would you participate in the program again?
________________________________________________________________________
________________________________________________________________________

Other Comments:
________________________________________________________________________
________________________________________________________________________

Page 1 of 2
Please rate your level of satisfaction with the following aspects/components of the School Fruit & Vegetable Snack Program by circling on a scale of 1 ----- 5

Satisfaction:

Circle the appropriate response for each of the 5 Aspects/Components:

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Appendix B. School Stakeholder Interview Schedules

TEACHER’S FOCUS GROUP INTERVIEW SCHEDULE

1. What do you think about the School Fruit and Vegetable Snack Program?

2. What factors do you think supported the implementation of the School Fruit & Vegetable Snack Program?

3. What factors do you think were challenges to implementing the School Fruit & Vegetable Snack Program?

4. What impact (+/-) has the School Fruit & Vegetable project had in your classroom? School? To date?

5. What do you think of the role of the PAC during implementation?

6. What do you think of the resources (written or financial) during implementation?

7. What would help you in the classroom? What changes would you suggest?

8. What are the lessons you would like to share through participating in the SFVSP?

9. Is there anything else that you wish to comment on?
PAC COORDINATOR FOCUS GROUP INTERVIEW SCHEDULE

10. What do you think about the School Fruit and Vegetable Snack Program (SFVSP)?

11. What factors do you think helped with the implementation of the SFVSP?

12. What factors do you think were challenges for the implementation of the SFVSP?

13. What impact (+/-) has the SFVSP had in your school to date?

14. How would you describe the response of your school community (teachers, parents, children) to the program?

15. What are the major lessons you learned through participating in the SFVSP?

16. How did you feel about the training session at the beginning of the SFVSP? Was it helpful? How could it be improved?

17. Is there anything else that you would like to add?
Appendix C. Supplier's and Distributor's Interview Schedule:

What do you think about the School Fruit and Vegetable Snack Program?

What were the benefits of participating in the School Fruit & Vegetable Snack Program related to your business?

What were the challenges to participating the School Fruit & Vegetable Snack Program related to your business?

What are the major lessons you learned through participating in the School Fruit & Vegetable Snack Program?

Is there anything else you wish to comment on that hasn’t been asked?