

# Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program

**FINAL REPORT**

**February 2018**

**Edith Cowan University  
Telethon Kids Institute**



# Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program

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Report commissioned by  
Foodbank WA  
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Department of Health  
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and Regional Development

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# Abbreviations

ABE	Attitude, behaviour and effort
AEW	Aboriginal Education Worker
AIEO	Aboriginal and Islander Education Officer
ANOVA	One-way analysis of variance
BMI	Body mass index
CALD	Culturally and linguistically diverse
CEWA	Catholic Education WA
CQI	Continuous quality improvement
DoE	Department of Education
DoH	Department of Health
DPIRD	Department of Primary Industries and Regional Development (previously known as the Department of Regional Development)
ECU	Edith Cowan University
FBWA	Foodbank WA
FS	Food Sensations
HPE	Health and Physical Education
HPS	Health Promoting Schools
ICSEA	Index of Community Socio Education Advantage
MoU	Memorandum of understanding
NEP	Nutrition education program
NGO	Non-government organisation
NIP	Nutrition information panel
PBIC	Partners for Breakfast in the Classroom
RDC	Regional Development Commission
SAER	Students at educational risk
SBNEP	School Breakfast and Nutrition Education Program
SBP	School Breakfast Program (WA)
SBPs	school breakfast programs
SROI	Social return on investment
TKI	Telethon Kids Institute
VfM	Value for money
WHO	World Health Organisation

# EXECUTIVE SUMMARY

## Overview

This report presents the final results and findings of the three-year evaluation of the School Breakfast and Nutrition Education Program (SBNEP) delivered by Foodbank WA to schools across Western Australia. The key aim of the SBNEP is to improve the nutrition and wellbeing of children who are vulnerable to poor diet and health by improving access to a variety of healthy foods in schools. The SBNEP is part of a suite of initiatives managed and delivered by Foodbank WA known as *Healthy Food for All*®, and has two key components:

- the *School Breakfast Program (SBP)* which provides products for schools to deliver healthy breakfasts and emergency meals to students in need; and
- *Food Sensations*® nutrition education and cooking lessons and resources.

The SBNEP specifically targets schools that have a low Index of Community Socio-Educational Advantage (ICSEA) and/or a significant subset of students at risk of disadvantage. It is jointly funded and monitored by the Department of Education (DoE), Department of Health (DoH), and Department of Primary Industries and Regional Development (DPIRD) (supported by Royalties for Regions) and is delivered by Foodbank WA under a contracted Service Agreement. The results of the SBNEP evaluation will be used by the three funding agencies to guide decision-making about future directions of the program.

## Summary of Findings

### Access to Breakfast by Vulnerable Children

#### *Has there been an improvement in the nutrition and wellbeing of vulnerable youth?*

The results of the SBNEP evaluation clearly show that the program is successful in assisting WA schools to address the hunger needs of vulnerable youth and students at educational risk due to factors such as poverty, family food insecurity, family dysfunction, Aboriginal or Torres Strait Islander heritage or cultural and linguistic diversity. The SBNEP is currently reaching more

than 420 schools and 17,500 students per year, located across all regions of WA - from inner metropolitan area of Perth to the remotest regions of the state.

The need to provide breakfasts in WA schools is increasing, not decreasing, as evidenced by the increase in average number of days of breakfast provision across WA from 2015-17. Schools in highly disadvantaged communities often provide regular lunches and snacks as well as breakfast, and emergency food parcels for families when needed. The core products provided by Foodbank WA are seen to be of good quality and provide a reasonable level of variety for students. Gaining access to good quality fresh produce is challenging for metropolitan and regional schools alike, albeit for different logistical reasons.

The ability to provide meals of sufficient nutritional value and variety is a concern for some schools, however, the majority are able to supplement their menus with products sourced through school funds, donations, and school/community kitchen gardens. We note there is evidence that the additional products being provided in a small proportion of schools are not compliant with the Department of Education's Healthy Food and Drink Policy. While this is not necessarily a general cause for concern, the right to access healthy food may be of greater importance for economically disadvantaged students whose overall diet is particularly nutrient poor and who are at increased risk of diabetes and other diet-related illnesses and diseases.

The support for vulnerable youth provided via the SBNEP is not strictly limited to low socio-economic areas, since pockets of disadvantage exist across the social spectrum. Schools in more affluent areas report the need to assist families who are struggling due to job losses and economic downturn. Such schools can make a case for accessing the SBNEP in order to meet the needs of their disadvantaged students, and those that have done so are very appreciative of the support. This flexible approach to SBP registration in WA is commendable in being more consistent with the best practice principle of universal free breakfast identified in the research literature [2, 3].

## Impact on Capacity for Learning

### *Has children's capacity for learning increased?*

There is good evidence within the research literature that school breakfast programs have a positive impact on students' educational outcomes. This was certainly true of the current evaluation for which there was strong, consistent agreement among all stakeholder groups that the SBP had a positive influence across a range of factors relating to capacity for learning, including readiness for learning, on task concentration, attendance, punctuality, productivity in class, behaviour and social skills. Schools see strong benefits of the SBP for individual students – particularly in terms of increased readiness for learning and greater ability to concentrate and focus.

At the classroom level, the SBP is seen to have a positive impact on the teaching and learning program by smoothing students' transition from home to school, reducing incidences of inappropriate and disruptive behaviour, and generally contributing to a greater sense of calm and order. Schools based in areas of severe disadvantage and food insecurity stressed that if they were not able to feed students, then learning could not take place and classrooms would be barely functional. It is important to note that the positive impact at the class level translated to positive impact on the overall school climate. A smooth transition from home to school and reduction in inappropriate behaviour across the classes contributed to a greater sense of calm and order at the school level.

While alleviating hunger and boosting energy levels are fundamental prerequisites for learning, the social environment of the SBP is also influential in lifting students' mood and increasing their receptiveness and willingness to engage with learning. Students were able to recognise and articulate the positive influence of the SBP on their capacity for learning. Whilst acknowledging impact across the full range of capacity for learning indicators, they particularly highlighted the positive influence on their attendance, punctuality, calmness and behaviour.

There was some evidence that students who attend the SBP on a frequent basis reap greater benefits in terms of capacity for learning than infrequent attendees. Among the case study

students, SBP attendance rate was lower for secondary students with correspondingly lower school, teacher and self-report ratings for school attendance, and other indicators of capacity for learning. Case study School B noted that students' attendance at the SBP dropped when they joined the secondary school program. We know that the onset of puberty has a negative effect on students' self-efficacy, school connectedness and academic achievement [4], so there are good reasons for schools to consider ways of boosting SBP attendance to mitigate these negative effects. Teenagers are more likely to be breakfast skippers or to arrive at school too late for a 'sit down' breakfast, hence traditional SBP models may not suit all schools that cater for secondary students.

## Impact on Attitudes Towards Healthy Eating

### *Have children's attitudes towards healthy food and nutrition improved?*

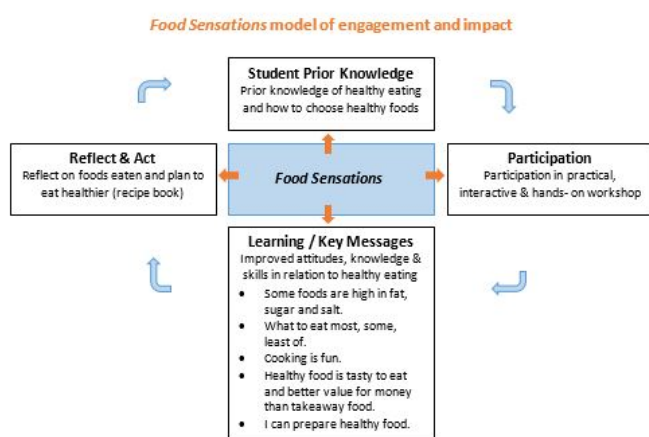
The research literature shows that school breakfast programs can be an important vehicle for promoting better eating patterns and modelling healthy behaviours. In the WA context, at very least, SBP students are being exposed to healthy food choices that they may not otherwise encounter in the home. Accordingly, the majority of stakeholders believe the SBP plays an important role in promoting positive attitudes to healthy eating. Students were more optimistic than the adult stakeholder groups about the influence of the SBP on their willingness to try new foods, but all stakeholders were in strong agreement that the SBP contributes to the overall health promoting environment of the school and school community.

In contrast to the relative continuity of the School Breakfast Program where students potentially receive repeated exposure to health eating messages, *Food Sensations* is a targeted, short term nutrition education intervention that schools may only be able to access every few years. *Food Sensations* sessions are typically only 90 minutes' duration, so it would be unreasonable to expect a major shift in students' attitudes to healthy eating after just one session. However, the evidence suggests positive gains, at least on a short-term basis, are made by students that participate in the program. Noteworthy change after completing a *Food Sensations* was that students were more likely to believe healthy meals are easy to prepare and that they were capable of preparing them. Teachers who participated in *Food Sensations*



were resoundingly positive about the suitability of the content and resources to students across a range of ages, social contexts and levels of literacy and numeracy. They reported that the practical, hands-on cooking experiences were highly motivating and empowering for students and hence they were often keen to try out the healthy recipes at home. Importantly, teacher feedback and the results of the student evaluations confirm that maintaining a clear focus on a limited set of key messages is highly effective within the constraints of a single lesson.

These findings support an earlier study of the impact of *Food Sensations* that showed the sessions “engage students in an innovative cycle of health and nutritional learning” [1, p. 111]. The model of engagement and impact shown below illustrates how students’ prior knowledge is used as a springboard to engage students in practical, hands-on activities through which several key healthy eating messages are conveyed. Students share the food they have prepared with the class as a whole and reflect on the foods they typically eat and what they might do differently in future.



Source: Modified from Byrne, et al. [1]

The international research literature shows that students’ attitudes and behaviours in relation to healthy food and nutrition are more likely to improve where the whole school environment has been modified to ensure key messages are constantly reinforced. This is also evident in the data collected for this study. In some schools there is little or no integration of the SBP with other school and classroom activities. However, many do achieve some level of integration. For example, primary schools often use *Food Sensations* ‘Superhero Foods’ resources such as placemats and posters to promote healthy eating messages and as a stimulus for discussion about healthy food choices. Primary schools also commonly link

the SBP to Crunch&Sip and other health-related initiatives such as the kitchen garden program. Less commonly, there are schools that adopt a whole school approach to student health and wellbeing and actively link the SBP and *Food Sensations* to a range of learning areas and curriculum strands, including life skills programs. In this way, key messages about nutrition and healthy eating are being reinforced in multiple ways through a variety of experiences. More so than others, these schools recognise the power and value of the *Food Sensations* program and resources in supporting their health and wellbeing ethos and agenda across the school.

## Impact on Knowledge and Skills Regarding Healthy Eating

### *Have children’s knowledge and skills in relation to healthy food and nutrition increased?*

The findings in relation to attitudinal change are echoed in those relating to students’ knowledge of healthy food and nutrition. The mere provision of healthy food choices through the School Breakfast Program goes some way to reinforcing the importance of healthy eating and informing students how to make healthy choices. However, schools report that involving students in preparing and/or serving food for the Breakfast Program further enhances their ability to choose and prepare healthy breakfasts and provides them with important knowledge and skills relating to food handling and hygiene. Students themselves were very positive about the influence of the SBP on their knowledge and skills – more so in fact than the adult stakeholder groups.

Discernible increases in students’ knowledge of healthy food and nutrition were found for the *Food Sensations* program. Both primary and secondary students showed small gains in a range of areas, including the correct identification of healthy versus less healthy foods, knowledge of the nutritional features of takeaway foods, knowledge of the amount of sugar in soft drinks, ability to interpret food labels, and knowledge of kitchen safety and hygiene practices. While the overall improvement in students’ knowledge was statistically significant, we believe the results may not be a true reflection of the level of change, and may in fact be an underrepresentation. This is because the design of the evaluation instruments was heavily influenced by the perceived need for efficiency in having a single generic assessment



instrument used for all *Food Sensations* sessions. Since not all content is covered in every *Food Sensations*, we believe assessment/evaluation instruments tailored to the content of specific lessons will give a more accurate picture of change in students' knowledge and hence better inform continued improvement and refinement of the *Food Sensations* program and the key messages that it seeks to promote.

## **Community Engagement and Partnerships**

### ***Have levels of partnership and collaboration increased?***

Parental engagement is recognised to be a key predictor of positive outcomes for children's health, wellbeing and education. The literature suggests that while schools in disadvantaged communities may be aware of the importance of engaging parents in their children's schooling, they often rely on passive measures that have little effect. Evidence drawn from SBNEP evaluation shows that approximately 40% of SBP schools draw on support from parents and families to assist in running the SBP. However, they commonly report difficulty in recruiting sufficient volunteers from within the school community and for some this was identified as a barrier to further expansion and improvement of their breakfast program. A few schools have recognised the value of the SBP as a catalyst for parental engagement. By promoting it as a community event where parents/carers and children alike can join in and socialise, they have helped bring families 'into the fold' who might otherwise be difficult to reach and engage.

Over the course of the evaluation, there was an increasing trend for schools to enlist help from students in order to reduce the burden on teaching staff. Some schools emphasised the value of student involvement as contributing to the development of important life skills and greater self-efficacy, as well as instilling values of reciprocity and giving. It is noteworthy that some schools saw the stringent health regulations regarding food handling as a deterrent to student involvement, while others saw this as an educational opportunity.

Only about a quarter of schools reported that they receive support from the wider community (other than parents/families and students) for their breakfast program. This includes outside

volunteers to assist in the day-to-day running of the program, donations of food products and financial support to purchase supplies or equipment. Schools that were successful in securing support from local businesses, community organisations and parents and families attributed this to being seen to have a genuine comprehensive ethos of care and concern for the health and wellbeing of students and families.

## **Impact on Community Cohesiveness**

### ***Has there been increased human capacity and community cohesiveness in targeted schools and communities?***

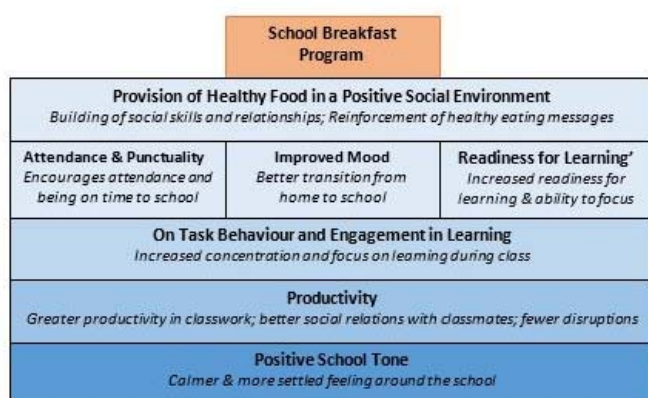
In examining the impact of the SBNEP on human capacity and community cohesiveness we have considered how participation in the SBP may have contributed to improving students' personal and social capability and the quality of their relationships with adults (staff and SBP volunteers) and peers, as well as the potential broader social influences of the program. As other studies have found, stakeholders – including students themselves, reported that the SBP was a safe and supportive social setting in which students were able to practice their social skills, develop better awareness of their own and others' feelings, and learn how to manage social situations. As with capacity for learning, the students who attended the SBP more frequently reported higher levels of impact on personal and social capability than those who attended infrequently.

For many schools, the social benefits of the SBP are seen as equally important and possibly a catalyst for the benefits noted in relation to capacity for learning. The informal setting of the SBP is perceived to contribute to the development of positive relationships between students and staff, and bring students together in a way that encourages a widening of friendship groups and greater sense of connection to the school. Those schools that include parents and families in the SBP report significant benefit for school-community relationships. Again, the informality of the setting and association of food with celebration and sharing helps break down barriers with families who may not have positive attitudes to schooling and facilitates the development of more cooperative relationships.

One of the most pervasive themes is that of calmness. Students in particular reported that

participation in the SBP helped them to feel calm at the start of the day, and teachers observed the marked difference in some students' behaviour and composure if they had missed breakfast club. School leaders and teachers described the SBP as having a palpable effect on the overall atmosphere of calmness and orderliness of the whole school. This 'cascading' influence of the SBP is captured in the model of engagement shown below. It builds on an earlier investigation of the School Breakfast Program [1] and encapsulates the interrelationship of the social and educational benefits at the whole school level. Some schools report that those benefits seen at the whole school level extend further to a reduction in incidence of antisocial behaviour beyond the immediate school environment.

School Breakfast Program model of engagement and impact



Source: Modified from Byrne, et al. [1]

## Satisfaction with the SBNEP

**Have program participants (staff, community organisations, community members) been satisfied with the program?**

Across the entire period of the evaluation, high levels of satisfaction with the SBNEP were expressed by school leaders, teachers, parents, and students alike. These stakeholders made it clear that the School Breakfast Program is not only essential to alleviate hunger and disadvantage within the school community but to ensure the effective running of the school. The issue of shame or stigma was noted by a few school representatives, however these schools took action to widen the access or reposition the program to mitigate the perception that the SBP was addressing poverty or neglect. Some concerns were expressed by a minority of school representatives that the SBP may be facilitating an abdication of parental responsibility or promoting

a culture of dependence. This view is not supported by the international literature, and as we have seen, feeding programs are an effective 'social protection tool' [5]. This may be an area where further work can be done to educate schools about the benefits of the School Breakfast Program.

While overall satisfaction with the SBP is very high, there are some commonly held 'wish list' items surrounding the delivery and pick up of Foodbank WA core products and access to fresh produce. These issues do not prevent schools from participating but are perceived as a barrier to expansion and improvement of the SBP in individual schools. Schools in which the breakfast program is part of an integrated approach to health and wellbeing seem better placed to deal with the inherent challenges and resource implications of feeding children on a daily basis.

School leaders and teachers are very appreciative of *Food Sensations* and have praised the organisation, teaching and classroom management skills of the presenters. Feedback from parents and students affirms the positive influence of the *Food Sensations* cooking experiences on students' motivation to prepare and eat healthy meals. Parents and students recommend that schools include more opportunities for hands-on nutrition education like *Food Sensations*.

The current terms of the SBNEP Service Agreement only allow for participation of approximately 20% of registered SBP schools per year. Hence, the demand for *Food Sensations* constantly outstrips supply. Schools that have an integrated approach to health and wellbeing have noted that more frequent access to *Food Sensations* would greatly enhance their programs. Consideration should therefore be given to an increase in investment of resources to enable a greater number of school visits each year and to investigate the use of more flexible delivery methods including the use of digital technology to engage a larger number of schools – particularly those in remote and regional areas where travel time and costs are prohibitive.

## Delivery Model

### *What factors (both positive and negative) impacted on SBNEP implementation?*

School communities across WA differ greatly in terms of their social contexts and health and educational learning needs, hence they also differ in terms of the rationale for implementing a breakfast program and desired outcomes and benefits. This study has identified the key implementation criteria and characteristics of SBPs in WA schools and captured them in a series of continua that reflect the flexible nature of SBP delivery across the state. These continua encompass frequency of operation, location/setting of the SBP, meals and menus provided, use of volunteers, nature of the SBP Coordinator role, and level of student involvement in running the SBP. Whilst we do not suggest there is a one-to-one correspondence, schools where the SBP is embedded within a whole school approach to improving student wellbeing and/or building community capacity generally have a more inclusive approach to the SBP and draw on a wider range of community resources (i.e. the right hand side of the continua).

Many of the factors identified in the literature as having an impact on the implementation of school breakfast programs were also evident in the SBNEP evaluation. Concerns about consistency of staffing, access to volunteers, time constraints, suitability of space, facilities and equipment to run the program, availability of funding, variety of foods and menus available, level of integration with strategic planning, and community promotion and buy-in were raised by case-study and non-case-study schools. However, none ultimately prevented implementation of the SBP, nor negated the perceived benefits and impact of the program within the individual school contexts.

It can be argued that the ‘negative’ factors that impact on SBNEP program implementation are indicative of a need to better tailor the program to the contextual needs of the school, students and community. Evidence from the international literature and participating SBNEP schools suggests that barriers to implementation can be minimised in time if a more integrated, whole school approach is adopted. It is important to stress that a breakfast program with a ‘narrow/singular purpose’ or that is ‘stand-alone’ in terms of integration with other school programs still serves an essential purpose in alleviating

hunger for vulnerable children, and therefore should not be devalued. However, there is clear evidence from the literature and the SBNEP evaluation that when the SBP is positioned within a broader purpose and rationale and highly integrated with strategic planning, there are greater opportunities to achieve positive impacts at the student, classroom, whole school and community level.

In this regard, the Health Promoting Schools Framework is highly relevant. It advocates a whole school approach to health promotion that “considers the broad health needs of all school community members” [6] through the purposeful linking of school environment (ethos, culture, policies, organisation, infrastructure), curriculum (teaching, learning, professional development) and partnerships (students, staff, professionals, agencies, community and services). While the HPS Framework is freely available to schools on the Department of Education website, and schools can access support from the WA Health Promoting Schools Association (WAHPSA), there may be value in more actively supporting its dissemination to SBNEP schools where the need for an integrated approach to health and wellbeing is more acute.

Our research found that schools with health promoting characteristics already embedded in their operations evidenced greater positive outcomes. It is possible then, that the SBP implementation continua can be re-designed as a self-reflection tool to assist schools to identify how they might increase the impact of the SBP in response to changing community needs. The tool could provide the basis for continuous improvement at both the school and system level.

## Value for Money

### *Is the program good value for money?*

The scope of the SBNEP evaluation has not included a cost benefit analysis. We have therefore approached the issue of value for money in terms of the ‘4 Es’ of economy (spending less), efficiency (spending well), effectiveness (spending wisely) and equity (spending fairly) [7], and considered what strategies have been used to achieve each of these goals.

Foodbank WA can be commended for ensuring that the State Government’s investment in the SBNEP has delivered value for money. Every effort

has been made to minimise spending by the pooling of resources with partner organisations and utilisation of existing infrastructure and resources associated with Foodbank WA's role as a food rescue and hunger relief organisation. Efficiency has been achieved through the streamlined staffing of the School Breakfast Program and by partnering with regional health organisations so that the *Food Sensations* nutrition education program can be provided to additional schools and students at no extra cost to the taxpayer.

Stakeholders perceive that the SBNEP has been effective in delivering the intended outcomes and impact. The primary goal of feeding hungry children has been achieved and this has translated into a range of benefits for individual students, classrooms, and schools, and hence for the wider community.

Equity is of particular relevance to the SBNEP since this is about determining whether the programs or services in question are accessible to all the people for whom they are intended. In the case of the SBNEP, this means disadvantaged or vulnerable youth. The current SBP registration protocol does not arbitrarily exclude schools on the basis of population-level measures of socioeconomic disadvantage. Rather, it allows schools that may be based in apparently 'middle class' communities to make a case for why the program is needed for one or more groups of at-risk or disadvantaged students. From an equity standpoint, the literature and the evidence from this evaluation we believe this protocol should be continued.

## Sustainability

### *Has there been an impact on the longer-term sustainability of the program that better meets the needs of schools?*

The literature on sustainability of SBPs points to the need for program flexibility in order to overcome barriers to participation and adapt to student needs. The SBNEP evaluation has therefore approached sustainability from the perspective of whether the program can maintain its activities, intended outcomes and impact over time in response to changing community needs and contexts. In essence, this positions sustainability as being about continuous quality improvement.

Quantitative evidence of the length of continuous involvement of SBP schools together with qualitative evidence suggests that the program is sustainable - albeit with the premise that equivalent State Government funding continues to be provided into the future. We note that this would need to take account of rising costs in transport and food prices, among other things. The funding arrangements for other programs may also impact on SBP sustainability - the School Chaplaincy Program, for example, since some SBP schools rely heavily on support from their Chaplain to run their program.

At the school level, the main threats to sustainability were perceived as staffing levels and access to volunteers, time constraints, and financial/budgetary issues that limited the provision of adequate facilities and menu variety. A key 'protective factor' to mitigate these threats seems to be the adoption of an integrated approach to health and wellbeing which embeds the SBP in strategic planning. Our data - and the international literature - suggest that schools where this is in place are better able to generate and capitalise on opportunities for securing additional resources. Specific strategies that schools employ to ensure sustainability included active promotion of the SBP to the school community, careful management of volunteers, greater use of student support to run the program, allocation of appropriate facilities and equipment, and the fostering of community partnerships to increase resources including food donations, funding for additional food products or equipment, and volunteer support.

There is good evidence that many schools do change and develop their SBP over time. The frequency of breakfast provision has increased such that more schools are operating their SBP five days per week. Other changes and improvements that schools reported making during the 2015-17 period closely correspond to those areas identified as potential threats to sustainability. That is, schools enlisted greater staff or volunteer support, actively promoted the program to the school community, improved equipment or facilities, provided greater variety of food products and menus, and so forth.

The review of literature found evidence that schools may benefit from the input of 'expert partners' in building their capacity to form partnerships and collaborations that support the operation and sustainability of their SBP.



Consideration should therefore be given as to what mechanisms already exist for schools to access such support. For example, organisations such as the WA Health Promoting Schools Association (WAHSA) and Nutrition Australia may be able to offer some support. Schools can also make use of resources such as the Program Sustainability Assessment Tool [8] which identifies eight domains or factors that contribute to program sustainability. These encompass environmental support, funding stability, partnerships, organisational capacity, program evaluation and program adaptation.

## Performance Monitoring and Continuous Improvement

### *What performance monitoring and continuous quality improvement arrangements should exist into the future?*

The challenge for the SBNEP is to ensure that program monitoring requirements do not become so burdensome that they inhibit or deter schools from participating. Foodbank WA monitors the SBP and *Food Sensations* via an annual survey and evaluation instruments (respectively) as part of its Service Agreement. During the three-year evaluation period, SBP schools have been asked to provide more comprehensive information than has normally been required. This has placed extra burden on SBP Coordinators and others involved in the evaluation. For future ongoing monitoring, it may not be necessary for this level of intense data collection to continue.

It is important, however, that performance monitoring of the SBP is relevant and useful to schools themselves, since continuous quality improvement is both a school level and system level concern. The rationale for implementing a breakfast program, the outcomes and impact sought, and method of implementation are all decided at the school level. For future performance monitoring then, it would be preferable to modify the existing SBP Coordinator Survey instrument so that it functions as an annual 'SBP Evaluation Tool' to enable schools to track their own performance, and the data can also feed into system level evaluation that is a more accurate reflection of what schools are aiming to achieve.

An important element of performance monitoring is to have an understanding of the patterns of student participation in the SBP. Currently it

seems few schools have adopted systems for tracking student attendance. This is perhaps not surprising given the voluntary, informal nature of breakfast programs. Schools may also have concerns about imposing extra work on those who run the SBP, or of possible negative perceptions by students that they are about being 'monitored'. We note, however, that formal records with student names are not necessarily required and schools could develop their own method for keeping track of numbers and noting trends over time that are not labour intensive or intrusive.

The SBP implementation continua developed during this evaluation could inform the development of an 'SBP Integration Self-Reflection Tool' to be used by schools that wish to adopt a more integrated approach. This would aim to assist schools to reflect on how the SBP works in their particular context, the strategic focus for their SBP, the degree of integration based on the 'Health Promoting Schools' Framework, and the supports, partnerships, school capacity, planning and communication needed to ensure the ongoing improvement and operation of the SBP.

## Program Improvement

### *How can the operation of the program be improved in the future (lessons learned)?*

The evaluation of the SBNEP has provided compelling evidence of the high level of regard stakeholders have for both the School Breakfast Program and *Food Sensations* nutrition education program. No areas of low performance were identified, and stakeholders are both aware and understanding of the resourcing constraints within which Foodbank WA operates these programs. However, the extensive feedback elicited from stakeholders and Foodbank WA has highlighted some areas where efforts could be targeted in order to enhance service quality. While some have resourcing implications, several are focused on assisting schools to build their own capacity to access and generate resources.

### **School Breakfast Program**

- **SBP Toolkit:** The SBP Toolkit is an excellent resource for schools in setting up a school breakfast program. Since schools report greatest difficulty in accessing volunteers and financial resources, a short term investment could be made in upgrading the toolkit to provide more extensive information and suggestions about recruiting and managing

volunteers, engaging parents and community support, and tracking attendance. The toolkit could also place greater emphasis on the need to comply with the Department of Education Healthy Food and Drink Policy so that schools have a better understanding of the health implications of providing high sugar or nutrient poor foods to vulnerable populations.

- *Monitoring of SBP Attendance:* Few schools seem to keep records of attendance at the SBP. To assist with program monitoring and continuous improvement schools should be encouraged to keep informal attendance records for the SBP.
- *Use of School Networks:* Schools that access core products direct from a Foodbank WA branch find it difficult to access during school hours due to the length of time required for travel, pickup and unpacking which may take several hours. School networks and hubs could therefore be encouraged to pool resources and develop a roster system for collecting goods so that the number of trips required by individual schools could be reduced. This may require a minor change to the limit Foodbank WA imposes on the number of people that can be authorised to access products on behalf of the school.

Networks may also be better placed to garner community support in the form of volunteers, food donations, philanthropic grants or funding to purchase additional food supplies or equipment. This might also include funding of a staff position to manage and oversee SBPs.

- *Dissemination of SBP Best Practice:* Several schools have suggested forming a Breakfast Club network where information can be shared. Schools have developed innovative ways of delivering the SBP and value-adding, so these strategies could be more widely shared. This could be offered through the Foodbank WA website or dedicated area within the Department of Education website. As this has workload implications for Foodbank WA staff, the funding bodies could consider whether additional resources can be redirected from within the student health/wellbeing portfolios of their own agencies.

### ***Food Sensations***

- *Assessment Tools:* The existing generic evaluation instruments for *Food Sensations* do not accurately reflect the content covered in specific lessons. Hence, separate instruments created and tailored to the content of specific lessons.
- *Resources for Secondary Students:* The Superhero Foods characters and accompanying resources are very effective in engaging primary students and secondary students in some contexts. Given the higher incidence of breakfast skipping, poor diet and health-related risk-taking among teenagers, consideration should be given to assembling nutrition education resources targeted to older teenagers. This may not necessarily involve new resources, but could involve adapting current resources or tapping into resources that are currently available elsewhere.
- *School Visits:* Consideration should be given to allocation of more resources to allow for more school visits per year. This could include a specific allocation to support schools that have adopted a 'Health Promoting Schools Framework' and are seeking more sustained engagement with nutrition education across the school and within their community.
- *Flexible Delivery Options:* The potential for developing online or real time video workshops should be explored to allow remote schools and others to have greater access to the program – particularly within the context of a whole school approach to health and wellbeing.
- *Staff Development:* The high quality of *Food Sensations* face-to-face teaching and online resources is recognised and valued by stakeholders. To maintain this high standard, ongoing professional learning opportunities should continue to be provided to induct new staff and maintain and upgrade the knowledge and skills of existing staff. Given the complex social environments of the schools that the *Food Sensations* team engage with, this ongoing professional learning should include cultural competency training and managing/guiding student engagement and behaviour.

## Recommendations

The results of the evaluation have confirmed that the School Breakfast and Nutrition Education Program is a highly successful and efficiently run program. The following recommendations are therefore made in the spirit of ensuring that the current quality of service by Foodbank WA is not compromised and that the program can continue to develop and meet the changing needs of vulnerable students and school communities into the future. These have been organised according to the applicable program.

### *School Breakfast Program*

- R1** The School Breakfast and Nutrition Education Program should be continued and consideration given to increasing the resource allocation to reflect the recommendations that follow.
- R2** Consider providing additional short term resources to **upgrade the School Breakfast Program Toolkit** to include more extensive information and emphasis on recruiting and managing volunteers, engaging parents and community support, tracking attendance, and complying with Department of Education Healthy Food and Drink Policy guidelines.
- R3** As part of the SBP registration process, request that schools indicate how they will **track student attendance** on a formal or informal basis for performance monitoring purposes. It is suggested that a pilot study with a selection of schools is undertaken to trial and refine effective mechanisms to formally or informally track student attendance at the SBP.
- R4** Consider providing additional resources to **set up a School Breakfast Program Best Practice Network** to share and develop innovative ways of delivering the SBP and value-adding. It is suggested that this network be online to facilitate engagement and collaboration and could be housed either within the Foodbank WA or Department of Education website.
- R5** Foodbank WA and the Department of Education should **encourage more collaboration amongst schools** for efficiencies in food collection and resourcing of breakfast programs. This could be done at a District and School Network level through Network Principals and via school leader professional associations. We propose conducting a pilot study with selected networks covering key districts across the state to trial the feasibility and effectiveness of this approach.
- R6** Consider establishing a **small grant scheme for SBP schools to apply for funding to upgrade equipment or facilities** as part of a continuous improvement plan. Dependent on available funding, the scheme could be an annual or biannual process where schools undertake an application process that is assessed by the SBNEP Reference Group.
- R7** Where there is a **demonstrated need to assist vulnerable students**, continue to **allow schools in higher socioeconomic areas to access the School Breakfast Program**.
- R8** **Develop the SBP implementation continua into an 'SBP Integration Self-Reflection Tool'** for schools to assist them to transition to a more integrative, whole school approach. **Trial the SBP reflective tool in a small number of schools to develop and refine the instrument and ascertain its effectiveness.**
- R9** Consideration should be given to **future development of alternative SBP delivery models** that encourage greater participation by secondary students. This could include trialling of a 'Grab'n'Go' model in a small number of schools.

### *Food Sensations*

- R10** **Re-develop and pilot existing Food Sensations student evaluation instruments** to provide better data for performance monitoring purposes by tailoring them to the content of specific lessons.
- R11** **Tailor Food Sensations resources to suit older teenagers.**

**R12** Consider allocating additional resources to **allow for additional *Food Sensations* school visits per year**. This could include a specific allocation to support schools that have adopted a 'Health Promoting Schools Framework'.

**R13** Consider allocating additional resources on a fixed or short term basis to **explore and develop flexible delivery options for *Food Sensations*** including online real time workshops that will increase access to the program, particularly for regional and remote schools.

**R14** Ensure that **continuing professional learning opportunities are provided for new and existing *Food Sensations* staff** to maintain and grow their skills and expertise. This should include cultural competency training and managing/guiding student engagement and behaviour.





# **SBNEP FINAL REPORT**

# 1. Introduction

## 1.1 Purpose of the Evaluation

This report presents the findings of a comprehensive evaluation of the Western Australia (WA) School Breakfast and Nutrition Education Program (SBNEP). The overarching aim of the SBNEP is to improve the nutrition and wellbeing of children who are vulnerable to poor diet and health by improving access to a variety of healthy foods in schools. The SBNEP is jointly funded by the Government of Western Australia Department of Education (DoE), Department of Health (DoH), and Department of Primary Industries and Regional Development (DPIRD) (supported by Royalties for Regions). The program is delivered to schools throughout the state by Foodbank WA under a contracted Service Agreement. A Reference Group comprised of representatives from each of the funding bodies has broad oversight of the SBNEP and a particular role in monitoring the evaluation. The SBNEP Reference Group is chaired by the Department of Education as the Service Agreement manager.

The purpose of the evaluation is to determine the extent to which the SBNEP has delivered the intended activities/outputs, outcomes and impacts and provided value for money. The results of the SBNEP evaluation will be used by the three Government funding bodies, the SBNEP Reference Group, and Foodbank WA to guide decision-making about future directions of the program.

## 1.2 Evaluation Team

A team of researchers from the School of Education and School of Medical and Health Sciences at Edith Cowan University (ECU) and the Telethon Kids Institute (TKI) was selected to conduct the SBNEP evaluation via a competitive tendering process. The cross-disciplinary ECU/TKI team brings together expertise spanning education, public health, nutrition education, and health promotion, as well as extensive experience in researching and working with students and communities from low SES backgrounds.

## 1.3 Research Questions

The design, implementation and reporting of the SBNEP evaluation was driven by the following key research questions:

1. Has there been an improvement in the nutrition and wellbeing of vulnerable children?
2. Has children's capacity for learning increased?
3. Have children's attitudes towards healthy food and nutrition improved?
4. Have children's knowledge and skills in relation to healthy food and nutrition increased?
5. Has there been any impact on the longer-term sustainability of the program that better meets the needs of schools?
6. Has there been increased human capacity and community cohesiveness in targeted schools and communities?
7. Is the program good Value for Money?
8. What factors (both positive and negative) impacted on the implementation?
9. Have program participants (staff, community organisations, community members) been satisfied with the program?
10. Have levels of partnership and collaboration increased?

11. How can the operation of the program be improved in the future? (lessons learned)
12. What performance monitoring and continuous quality improvement arrangements should exist into the future?

The evaluation framework, data collection methods and research instruments used to answer these research questions are described in Chapter 3.

## 1.4 Overview of the SBNEP

This section provides important information about Foodbank WA and how it organises and delivers the SBNEP in order to establish the context for interpreting the findings and understanding the implications of the conclusions and recommendations.

### 1.4.1 About Foodbank WA

Foodbank WA is a not-for-profit hunger relief organisation that collects edible but surplus food and groceries from various growers, farmers, manufacturers, distributors and retailers, and redistributes this to people in need. Foodbank WA is part of a larger Foodbank federated charity which was first established in NSW in 1992. Foodbank now has representation in every state plus the Northern Territory, and its national office is based in Sydney. Foodbank WA commenced operations in 1994.

The head office for Foodbank WA and its Perth distribution centre are co-located in the suburb of Perth Airport. Foodbank WA regional branches and food distribution centres are based in Albany, Bunbury, Geraldton, Kalgoorlie-Boulder, and Peel (Mandurah). The Foodbank Perth branch provides food to local agencies and also distributes food to its regional branches and directly to schools in remote areas.

In addition to donations of food and other services, Foodbank WA receives financial support from public and corporate sector organisations to help cover the cost of items that cannot be sourced through donations, and to fund specific initiatives such as the SBNEP.

### 1.4.2 SBNEP Components

The SBNEP consists of two distinct programs that were designed and delivered by Foodbank WA under the auspices of its *Healthy Food for All*<sup>®</sup> strategy. These are:

- the *School Breakfast Program* (SBP) - which provides products for schools to deliver healthy breakfasts and emergency meals to disadvantaged students; and
- the *Food Sensations*<sup>®</sup> nutrition education and cooking program.

The SBNEP especially targets schools with a low Index of Community Socio Educational Advantage (ICSEA); and/or a significant subset of students at risk of disadvantage. An overview of how each program is managed and delivered by Foodbank WA is provided below.

#### School Breakfast Program

THE SBNEP Service Agreement requires Foodbank WA to maintain delivery of a minimum of 404-420 School Breakfast Programs to schools. These minimums were exceeded in 2016 and 2017, with some 430 schools receiving the program. For the first time in 2017, Foodbank placed a cap on the number of registrations and a waiting list was implemented. This was necessary because of increased costs for food, transport and salaries.

Food products for the School Breakfast Program are delivered to schools across all regions of Western Australia, including the far north (Kununurra), far south (Esperance and Albany) and the eastern desert regions bordering South Australia and Northern Territory. Since 2013, the annual total quantity (by weight)

of food distributed has exceeded 400,000 kilograms[9, p. 20]. Table 1.1 below provides an overview of the School Breakfast Program operational processes and procedures that are managed and administered by Foodbank WA. More detailed information about how Foodbank WA operates the School Breakfast Program is provided in the *School Breakfast Program Toolkit* [10].

**Table 1.1: Overview of School Breakfast Program operational processes and procedures\***

	<b>Metropolitan &amp; Regional Schools</b> (within proximity of a Foodbank branch)	<b>Remote Schools</b> ( <u>not</u> within proximity of a Foodbank branch)
<b>SBP Registration Process</b>	<ul style="list-style-type: none"> <li>Schools complete an online registration form and upload a letter of support. Registration opens in November of the preceding year and remains open throughout the school year.</li> <li>Schools must nominate an SBP Coordinator to be the main contact for all SBP correspondence.</li> <li>Re-registration is required every year.</li> <li>Confirmation of registration is via email.</li> </ul>	
<b>Criteria for Accessing the Service</b>	<ul style="list-style-type: none"> <li>Schools identify vulnerable groups within the school community, including Aboriginal or Torres Strait Islander students; culturally and linguistically diverse (CALD) students (e.g. on-arrival migrant/refugee, non-English speaking background); and other students at risk (SAR) due to poor attendance, poverty, homelessness, transport, family dysfunction, or family food insecurity.</li> <li>Letter of support: Schools with high ICSEA (i.e. deciles 1-5) must describe why a SBP is needed within their school community. Not essential for low ICSEA schools (deciles 6-10), but most do provide them.</li> </ul>	
<b>Food Products</b> <i><b>SBP Core</b></i> (Free of charge; SBP stock, supply guaranteed)	<ul style="list-style-type: none"> <li>7 core (non-perishable) products: canned fruit in natural juice, wheat biscuits, traditional oats, vegemite, spaghetti (canned), baked beans, UHT milk.</li> <li>Core products must be used for a breakfast program or other emergency meals program within the school environment.</li> </ul>	<ul style="list-style-type: none"> <li>8 core (non-perishable) products: As for metro/regional schools plus UHT orange juice (100% unsweetened). This is a donated product, therefore subject to availability.</li> <li>Core products must be used for a breakfast program or other emergency meals program within the school environment.</li> </ul>
<i><b>SBP Perishable</b></i> (Free of charge; sourced from Foodbank stocks & subject to availability)	<ul style="list-style-type: none"> <li>Perishables (bread, yoghurt, fresh fruit, fresh vegetables) are subject to availability from Foodbank stocks.</li> <li>SBP fruit and vegetables can be used in whole-of-school activities outside the breakfast/emergency meals program. Cannot be accessed in isolation.</li> </ul>	<ul style="list-style-type: none"> <li>Perishables (bread, fresh fruit &amp; fresh vegetables) are subject to availability from Foodbank stocks and transport logistics.</li> <li>SBP fruit and vegetables can be used in whole-of-school activities outside the breakfast/emergency meals program. Cannot be accessed in isolation.</li> </ul>
<i><b>Non-SBP Product</b></i> (Schools pay for products; sourced from Foodbank stocks)	<ul style="list-style-type: none"> <li>Schools able to access a Foodbank branch may purchase non-SBP products (e.g. rice, flour, pasta, tinned vegetables, etc.) from Foodbank WA's general stocks to supplement their SBP or support other food literacy/cooking programs. Non-SBP products cannot be pre-ordered.</li> <li>No Foodbank products (free or purchased) can be used for profit or fundraising activities.</li> </ul>	
<b>Supply Quantities &amp; Limits</b>	<ul style="list-style-type: none"> <li>Each product provided in cartons/trays of 9-12 items. Up to 4 cartons/trays can be ordered at a time.</li> <li>Schools can liaise with Foodbank WA if they require access to greater quantities of products per visit.</li> </ul>	<ul style="list-style-type: none"> <li>Core products provided in 'Standard Term Packs' (420kg) based on supply of 24 meals, 5 days/week for 10 weeks (hot &amp; cold). Orders can be customised.</li> <li>UHT Juice: maximum of 120 litres per term.</li> <li>Fresh produce not available to majority of remote schools due to transport and food safety considerations.</li> </ul>
<b>Order Frequency</b>	<ul style="list-style-type: none"> <li>Weekly, fortnightly or monthly, depending on individual school's preference. Larger 'per term' orders available on request.</li> <li>Metro schools: Order submitted online at least one day in advance.</li> <li>Regional schools: Order forms faxed/emailed to Foodbank branch at least one day in advance.</li> </ul>	<ul style="list-style-type: none"> <li>Once per term.</li> <li>Mid-term orders available on request.</li> </ul>
<b>Access &amp; Supply</b>	<ul style="list-style-type: none"> <li>Authorised school representatives pick up products from the designated Foodbank branch during opening hours (typically 9am – 3pm, but varies between branches and day of week).</li> <li>Schools can nominate up to 4 representatives to collect products.</li> </ul>	<ul style="list-style-type: none"> <li>Orders filled &amp; dispatched from relevant Foodbank branch. Transport costs covered by Foodbank WA. Schools can nominate to cover their own transport costs.</li> <li>Products (including perishables, if available) are transported by unrefrigerated trucks at start of each term.</li> <li>Perishables: Fruit/veg is chilled &amp; packed in foam boxes; bread is dispatched frozen but thaws in transit.</li> </ul>

<sup>1</sup> Sources: *School Breakfast Program Toolkit*; interviews with Foodbank WA staff; SBNEP Annual Program Report (Foodbank WA, March 2016).

## Food Sensations – Nutrition Education Program

The terms of the SBNEP Service Agreement require Foodbank WA to maintain delivery of a minimum of 140 *Food Sensations* sessions to a minimum of 67 schools each year. These minimum requirements were exceeded by Foodbank WA in 2016 and 2017. The demand from schools for *Food Sensations* exceeds Foodbank WA capacity, so a needs assessment process and criteria for prioritising schools has been implemented. To support regional and remote schools and extend the reach of *Food Sensations*, Foodbank WA has implemented a Regional Strategy. A key feature of the Regional Strategy is the establishment of memoranda of understanding (MoUs) with regional health organisations such as the WA Country Health Service and provision of training to their health/community professionals (e.g. dietitians, nutritionists, nurses, Aboriginal Health Workers) to enable them to independently deliver *Food Sensations* to schools in their catchment area. In 2016 this meant that an additional 36 regional schools (i.e. outside the SBNEP Service Agreement) received *Food Sensations*, thus extending the reach of the program by more than 50%.

Table 1.2 provides an overview of the design and delivery of *Food Sensations*. In accordance with Foodbank WA's Regional Strategy, responsibility for delivering *Food Sensations* in schools is split between a metropolitan and regional team. Differences in the organisation and delivery of *Food Sensations* to metropolitan and regional schools are outlined within the table.

**Table 1.2: Overview of *Food Sensations* operational processes and procedures\***

	Metropolitan	Regional
<b>Eligibility &amp; Expressions of Interest</b>	<ul style="list-style-type: none"> <li>All registered SBP schools are eligible to receive <i>Food Sensations</i> sessions free of charge.</li> <li>Expressions of interest can be lodged by schools via: SBP registration form (submitted in November for the following year), online form on the <i>Superhero Foods HQ</i> website<sup>1</sup>, or by contacting Foodbank WA directly.</li> </ul>	
<b>Criteria for Prioritising &amp; Selecting Schools</b>	<ul style="list-style-type: none"> <li>Priority given to Perth metropolitan schools that have not previously participated.</li> <li>Schools that cannot be accommodated are directed to the <i>Superhero Foods HQ</i> website<sup>1</sup> where resources can be downloaded by staff.</li> </ul>	<ul style="list-style-type: none"> <li>Priority given to regional schools that have not previously participated. Travel route considerations (distance, season/accessibility, etc.) are key, plus capacity for partner organisations to deliver the program (see below).</li> <li>Where possible, schools that cannot be accommodated are referred to Foodbank WA partner organisations<sup>1</sup>.</li> <li>Schools that cannot be accommodated by either Foodbank WA or its partner organisations are directed to the <i>Superhero Foods HQ</i> website where lesson plans and other resources can be downloaded<sup>1</sup>.</li> </ul>
<b>Number of Sessions per School</b>	<ul style="list-style-type: none"> <li>Currently limited to 3 sessions per school: 2 delivered on-site at the school; 1 conducted at Foodbank WA (<i>Fun Food Adventure</i>)<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>From 1-6 sessions per school, depending on school population and duration of visit.</li> </ul>
<b>Session Details</b>	<ul style="list-style-type: none"> <li><i>Session Length</i>: Usually 90 minutes, but may vary from 60-120 minutes depending on individual school needs.</li> <li><i>Target Age Groups</i>: Lessons are pitched at students from Foundation to Year 2, Years 3-6, Years 7-8, and Years 9-10. Where needed, presenters modify lessons to cater for diverse age groups. In small schools, older students (Years 11-12) may also be involved.</li> <li><i>Structure</i>: Each session includes interactive classroom activities plus a hands-on cooking lesson in which students create a homemade meal using simple, healthy ingredients and then share it with their classmates.</li> <li><i>Lesson Plans</i>: Objectives and content of each lesson are linked to the Health and Physical Education Learning Area of the Australian Curriculum. Lessons currently available are: <ul style="list-style-type: none"> <li><i>Foundation-Year 2</i>: 1 lesson ('Eat Like a Rainbow Snake') plus a hands-on cooking lesson</li> <li><i>Years 3-6</i>: 4 lessons ('Australian Guide to Healthy Eating Race'; 'Sugar in Drinks'; 'Homemade vs Takeaway'; 'Joe's Food Choices') plus a hands-on cooking lesson.</li> <li><i>Years 7-8</i>: 4 lessons ('Australian Guide to Healthy Eating Race'; 'Sugar in Drinks'; 'Homemade vs Takeaway'; 'Value for Money') plus a hands-on cooking lesson.</li> <li><i>Years 9-10</i>: 2 lessons ('Sugar in Drinks'; 'Homemade vs Takeaway') plus a hands-on cooking lesson.</li> </ul> </li> <li>Details of each lesson plan and accompanying resources are available from the <i>Superhero Foods HQ</i> website<sup>1</sup>.</li> <li><i>Cooking Lesson</i>: Practical skills covered in the cooking lesson include: safe food handling, hygiene, and food preparation skills such as chopping, grating, sautéing, flipping and whisking.</li> </ul>	

Table 1.2: (Cont.)

	Metropolitan	Regional
Presenters	<ul style="list-style-type: none"> <li>Members of the Foodbank WA <i>Food Sensations in Schools</i> team. All are tertiary qualified dietitians and nutritionists.</li> <li>Where possible, parent/teacher volunteers at each school assist with the cooking activities.</li> </ul>	<ul style="list-style-type: none"> <li>Members of the Foodbank WA <i>Food Sensations in Schools</i> (Regional Strategy) team. All are tertiary qualified dietitians and nutritionists; OR</li> <li><i>Food Sensations in Schools</i> (Regional Strategy) team assisted by staff from partner organisations; OR</li> <li>Qualified staff from partner organisations who have received training from the <i>Food Sensations in Schools</i> (Regional Strategy) team.</li> <li>Where possible, parent/teacher volunteers at each school assist with the cooking activities.</li> </ul>
<sup>1</sup> Value Add	<p>Foodbank WA enhances the services and resources available to schools participating in the SBNEP by partnering with other organisations (currently &gt; 20) and acquiring additional funding from external sources. These additional and/or enhanced services/resources include (but are not limited to):</p> <ul style="list-style-type: none"> <li><i>Superhero Foods</i>: Food characters that depict everyday healthy food choices and less healthy foods in an engaging way. Characters are integrated into games, placemats, storybook, and <i>Food Sensations</i> lesson plans. Funding was sourced outside the SBNEP Service Agreement to develop and disseminate the resources free of charge to registered SBP schools. Electronic versions of the resources are available from the <i>Superhero Foods HQ</i> website: <a href="https://www.superherofoodshq.org.au">https://www.superherofoodshq.org.au</a></li> <li><i>Delivery of Food Sensations by Partner Organisations</i>: Training is provided for regional health professionals in partner organisations (e.g. WA Country health Service) to co-deliver or independently deliver <i>Food Sensations</i> to schools;</li> <li><i>Fun Food Adventure</i>: Excursion to Foodbank WA for metropolitan schools – includes a <i>Food Sensations</i> session and tour of the distribution centre. External funding was acquired to provide free bus transport for schools;</li> <li><i>Regional Travel</i>: Collaboration with partner organisations to reduce the costs of travel when delivering <i>Food Sensations</i> in regional/remote schools;</li> </ul>	

\* Sources: Foodbank WA and Superhero Foods HQ websites; SBNEP Annual Program Report (March 2016); *School Breakfast Program Toolkit* (Chester, 2015), interviews with Foodbank WA staff.

## 1.5 Structure of the Final Report

The following chapters of the report present a synthesis of the key findings and results of the SBNEP evaluation based on data collected over the period September 2015 – December 2017. We begin with the findings of a targeted review of the international and national literature relating to school breakfast and nutrition education programs in Chapter 2. The literature review summarises the evidence relating to impact on children's capacity for learning and knowledge and skills regarding healthy eating, the efficacy of different modes of school breakfast program and nutrition education delivery, and approaches and methods used to evaluate such programs. The initial and ongoing findings of the literature review have informed the design and methods of evaluation used here, and these are described in Chapter 3. Details of how the SBNEP operates in WA schools and the factors impacting on implementation are presented in Chapter 4. Chapters 5-11 present key findings linked to the key research questions and outcome and impact measures stipulated for the SBNEP. Conclusions based on the evaluation findings and insights from the national and international literature are presented in Chapter 12, followed by a list of recommendations in Chapter 13. As an epilogue to our report, Chapter 14 presents three vignettes that attempt to convey the lived experience of students who access the SBNEP.

## **2. Literature Review**

### **2.1 Introduction**

#### **2.1.1 Aim and Purpose of the Literature Review**

This literature review explores the objectives, outcomes and impacts of national and international school breakfast programs (SBPs) and nutrition education programs (NEPs) for students, particularly those vulnerable to poor diet. It also examines the processes, successes and barriers of implementing such programs and seeks to recommend best practices from the evidence found for successful implementation and sustainability.

#### **2.1.2 Literature Review Methodology**

A comprehensive search of published peer reviewed and grey literature was conducted at the commencement of the evaluation, and again from June to October 2017. Search terms were identified/determined from the SBNEP evaluation objectives. Table 2.1 indicates all search terms used and combinations of those terms. All literature selected was published between the years 2000 and 2017.

The databases used to conduct the literature search were as follows: Edith Cowan University library WORLDSEARCH database which contains 60 databases such as the Cochrane Library, ProQuest Central and ERIC. Google Scholar was also accessed for finding peer reviewed articles. Grey literature search strategy included using customised Google search engines that included Government, NGO and IGO sites [11]. Key websites of relevant organisations such as the World Health Organisation and World Food Program were also searched for suitable documents for this review. Overall, 155 articles and documents were suitable for inclusion in this review.

### **2.2 Overview of School Breakfast Programs**

School breakfast programs have emerged from the recognised need to feed/nourish socially disadvantaged children vulnerable to food insecurity [12-14]. The World Bank describes such programs as a 'social protection tool' [5] to support the education and health of children and adolescents through improved capacity for learning and promotion of healthy eating, with the school being widely accepted as an effective setting for intervention [14-18].

There is a body of published research that points to the benefits of consuming a good breakfast, not only for physical health and wellbeing through improved nutrition [19-21], but also supporting the premise that students are more readily engaged for learning, with participation in SBPs having been shown to improve school attendance [22], class behaviour [23] and academic achievement [24, 25]. SBPs can also be a means for facilitating meaningful social interactions with peers and mentors such as older students, teachers, support staff and community volunteers [26-29] leading to a stronger sense of school connectedness which in turn contributes to positive education and health outcomes [15, 25]. In addition, the effectiveness and sustainability of SBPs and NEPs are dependent upon programs being embedded within the school setting [30] and supported by sector policy [31]. In Australia, the school setting is of key importance to the successful deployment of SBPs and NEPs [18, 27, 32, 33], and consequently their role and place-based approach provides support, networking and advocacy opportunities with, and for, other key stakeholders, including families and communities, and those in government, policy and health care systems, and the media.



**Table 2.1: Summary of search terms used for the literature review**

SCHOOL	AND	BREAKFAST FEEDING "FOOD ASSISTANCE"	AND/OR	PROGRAM "FOOD SCHEME" UNIVERSAL FREE EDUCATION NUTRITION KNOWLEDGE	OR	EVALUATION DESIGN IMPACT REVIEW IMPLEMENT* EFFECTIVE* "BEST PRACTICE" ATTENDANCE PARTICIPATION DELIVERY BARRIER* PARENT*/VOLUNTEER*/COMMUNITY PARTNERSHIP*/COLLABORATION TEACHER*/PRINCIPAL*/STAFF RECOMMENDATION* SUSTAINABILITY "VALUE FOR MONEY" "ECONOMIC ANALYSIS" CAPACITY LEARN* BEHAVIOUR* "WELL BEING" HEALTH "FOOD BANK"
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This relationship between health and education underpins the World Health Organization's (WHO) Health Promoting Schools (HPS) framework, an approach that promotes health in schools and addresses the whole school environment [34]. "The framework includes three key domains: the formal curriculum, school ethos [and] the school-home-community interaction" [32, p. 34]. Radcliffe [32] and others have been increasingly supportive of the framework to build capacity and deliver effective ways to promote nutrition and health in the school setting [30, 35].

The evidence indicates that nutrition promotion programmes using the HPS approach can increase participants' consumption of [healthier foods such as fruit, vegetables and whole grains]. It can also reduce participants' 'breakfast skipping', as well as reduce intakes of... low-nutrient dense foods, fatty and cream foods, sweet drinks consumption and eating disorders. It can help to develop hygienic habits and improved food safety behaviours. [30, p. 1082]

### 2.2.1 International Experience of SBPs

Today, most countries, both developed and developing, offer some type of school meal program [14, 36, 37]. The World Food Program, the world's largest humanitarian organisation addressing hunger and promoting food security, has been working with governments and non-government organisations for over 45 years to support school feeding programs in developing nations<sup>4</sup>. As a branch of the United Nations, it receives

<sup>4</sup> [www.wfp.org/node/14901](http://www.wfp.org/node/14901)

donations from governments globally, including Australia, to sustain over 80 developing nations' school meal programs, providing food and/or technical support<sup>5</sup>. While the goal of lifting human capacity through improving health and education is global, the context surrounding SBP intervention varies between and within countries, explained in part by differences in political, social, cultural and geographical environments. This is relevant when considering how programs are designed, implemented and evaluated in order to ensure their effectiveness and sustainability. As Wang [30] suggests, the design elements of programs need to not only recognise demographic differences, but consider other population-based influences such as socio-ecological, cultural and behavioural factors when exploring feasible and effective interventions for the target group. Furthermore, each school community population may have different requirements; for example, the additional need for supplementation in developing countries due to severe under-nutrition [38], or the adherence to national dietary guidelines in developed countries such as the USA, where obesity and malnutrition coexist due to high energy, low nutrient-dense food choices [20, 39, 40].

In the USA, SBPs were established in the 1960s to feed hungry children, including those arriving at school from distant rural areas [41]. After trials, pilots and subsequent evaluations, the SBP has become a permanent national service delivered to more than 90,000 schools across the country feeding over 14.8 million students annually [42] as part of the Child Nutrition Act since 1975 [16, 42, 43]. Federal funding provides free or subsidised meals to 80% of participating students who are from low income families [41, 44, 45]. Understandably, there has been a sustained effort in the USA to conduct research into the efficacy of SBPs which has led to continued improvements, including the development of policy that school meal menus must follow national recommended dietary guidelines [46-48]. Specifically, SBP evaluation is supported through greater resource provision and a uniform program structure. Thus, findings suggest breakfast program quality and the effectiveness of various program models successfully impact children's nutritional intake and their ability to learn. Low participation rates in SBPs have led to new recommendations of universal and more flexible delivery modes of breakfast to ensure increased uptake and participation and address the barriers of stigma and time constraints [49, 50].

Breakfast clubs in the UK were introduced more recently in the 1990s to support parents who need to leave home early for work as well as provide nourishment for children from low income backgrounds [51, 52]. Today, approximately 85% of UK schools run a breakfast club [53] funded from a range of sources, in many cases schools fund the clubs themselves with support from charities, businesses and government [54]. Wales is the exception where the government has legislated the provision of universal free breakfasts for all participating primary schools [54, 55]. Alderman [12, p. 204] notes that "school feeding programs are politically popular interventions". This is evident in the recent decision by the British Government's Department of Education to extend funding to a pilot program aimed at promoting the start-up and sustainability of breakfast clubs in schools with high levels of deprivation [56]. This decision followed a formal evaluation report on the successful outcomes from the pilot and recommendations for extension of the program.

SBPs are prevalent across Canada where funding support includes NGOs, provincial governments, corporate donations and local communities [3, 57]. One of the largest charities providing support for program start-up and maintenance of SBPs across Canada is 'Breakfast for Learning' [57]. Advocacy groups have been lobbying the Canadian government for several years for the establishment of a federally-funded national Food School Program in order to improve the access and maintenance of breakfast programs and provide national guidelines for best practice [3, 58].

## 2.2.2 Australian SBPs

Currently, Australia does not have a nationally funded or legislated breakfast program. Each state has programs run by various organisations such as Foodbank and the Australian Red Cross, as well as some

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<sup>5</sup> [www.wfp.org](http://www.wfp.org)

community group initiatives, to support disadvantaged primary schools. Foodbank, as Australia's largest food aid charity, is also "the largest provider of school breakfast programs in Australia, supplying more than 1500 schools nationally"<sup>6</sup>. As a non-profit organisation, Foodbank relies on donations of food and funding from the food industry, business and public sectors, and other NGOs, as well as grants from individual state governments. The Victorian Government has invested almost \$14 million over four years (2016-2019) to help expand the state's SBP through Foodbank VIC<sup>7</sup>. The Queensland government has just promised \$1 million to Foodbank QLD over four years for its SBP. Foodbank WA, with the longest running SBP since 2001, continues to receive approximately \$1 million per annum from the state government in support of its program. However, while WA has a smaller population than Victoria and Queensland, it has perhaps the greatest logistic challenges (apart from the Northern Territory) for transportation of food to its rural and remote communities. This burden adds to the costs of running its programs with increased difficulties in adequately supplying quality perishable foods, including fruit and vegetables and dairy products, to these remote areas [59].

People in rural and remote communities, including Indigenous populations, are the most vulnerable to food insecurity<sup>8</sup> [60, 61] with at least 1 in 5 children across WA experiencing food insecurity [59]. It is therefore prudent to consider that as food banks play an important role in supporting those experiencing food insecurity [61] this role cannot be fulfilled if they themselves have barriers to do so.

### 2.2.3 Resources and Support for SBPs

As illustrated above, SBP implementation is impacted by resource availability - namely food supply, infrastructure, personnel and intelligence from experiential learning and research translation to inform best practice and policy guidelines. Funding amount and source is also a critical consideration, since program objectives can be influenced by the policies of organisations that fund SBPs and insufficient funding is a definitive barrier to achieving program objectives [33, 56, 62].

Ultimately government or organisational policies and priorities determine SBP funding decisions, with renewal of funding agreements often contingent on evaluation activities that demonstrate accountability through outcomes that meet objectives, identify opportunities that build capacity or streamline practices, and provide evidence of efficiencies to ensure sustainability. It is through evaluation that opportunities and direction for program change can be elicited. As Alderman [12, p. 204] notes, however, "they (SBPs) are, nevertheless, difficult to assess in terms of effectiveness since their impact is partially on education and partially on school health". In addition, the influences on program implementation and outcomes can be complex, creating challenges for effective evaluation, but efforts should to be made to understand and quantify their impact [12]. Consideration of the breadth of evaluation efforts for SBPs reported in this review shows that various evaluation study designs have been used and both quantitative and qualitative data have been collected. Whilst comprehensive evaluations such as conducted by Moore et al. [63] of the Welsh government's free breakfast program may collect a range of quantitative input and outcome indicators as well as qualitative data from a range of stakeholders, ultimately the choice of evaluation design and methods will be determined by the objectives of the program, the level of accountability required and the resources and capabilities available for data collection and analysis.

## 2.3 Factors Impacting Implementation of SBPs

Many health and education authorities and organisations that provide SBPs have developed 'toolkits' or guidelines to help address factors known to influence implementation and maintenance of these programs. These resources are targeted to all stakeholders across the wider school community from coordinators,

<sup>6</sup> [www.foodbanksa.org.au/2017/09/05/fbsaschoolbreakfastturns12/](http://www.foodbanksa.org.au/2017/09/05/fbsaschoolbreakfastturns12/)

<sup>7</sup> [www.education.vic.gov.au/about/programs/health/Pages/breakfastclubs.aspx](http://www.education.vic.gov.au/about/programs/health/Pages/breakfastclubs.aspx)

<sup>8</sup> Food insecurity occurs when people do not have access to affordable nutritious food that supports their health and wellbeing.

school staff, volunteers and parent groups. The guidelines are often evidence based from previous program evaluations which incorporate learning of what worked well in other schools [3]. Importantly, there are many ways in which a school breakfast program can be run [64] and this is dependent on how schools choose to implement different aspects of the program [65]. This in part is determined by their individual organisational capacities and the needs of their students [56] as well as enablers and barriers to implementation [66]. Therefore, some of the key components of SBP implementation in all the toolkits include: meal location and equipment, program delivery, communication and promotion, staffing and training, funds, school operations, and food supply.

A good example is the “Healthy Minds” SBP pilot in New Brunswick, Canada [67] which targeted students from low income homes. The purpose of the study was to identify the challenges and successes of implementation, distinguish differences between urban and rural school needs and determine whether improvements were necessary, and gather feedback and suggestions for program maintenance from school principals. Over 50 schools participated, from two districts: District 8 included English speaking, mainly urban schools with no cafeterias, whereas District 9 included French speaking schools, located in more rural areas with on-site cafeterias. Funding to cover costs for food, equipment and operations for the pilot was provided by the provincial government. Each school was able to choose how they wanted to implement and run the program, while following provincial nutritional and safety guidelines.

A common issue for all schools was finding staff to run different aspects of the program on a daily basis. Some District 8 schools were successful in gaining support from parents, however, other schools often relied on the Principal and teachers and consequently had to find resourceful ways to operate with limited capacity. District 9 schools mostly used cafeteria staff who were paid extra to provide the breakfast service. This provided a resolution to the staffing issue, but reduced opportunities for parent and community engagement [67]. District 8 schools adopted a ‘Grab’n’Go’ service model, being creative with the foods they supplied that would be easy to serve and store and minimise clean up. Some Principals cited that the convenience of packaged foods made foods easy to store, reduced food waste from spoilage and appealed to the tastes of children and teenagers, with yogurt tubes being a popular example. Some of these schools found it initially challenging to find an appropriate space to serve breakfast. Solutions included finding available spaces in classrooms, gyms, multipurpose areas, art rooms or hallways. District 9 schools generally used their cafeteria areas to provide the service. Some of the District 8 schools bought food in bulk, often from local suppliers to save on food expenses, with the advantage of having those orders delivered. However, as District 8 schools did not have cafeterias, they had the burden of additional costs for equipment. Further, schools in rural areas had fewer options to access food which translated into higher prices. A few District 9 schools were able to partner with a rural producer and food co-operative to receive food donations of cheese, fruit and vegetables.

Participation rates across the two districts fluctuated throughout the study period which was in part due to differing levels of communication, parent perceptions that either encouraged or discouraged participation, and possible differences in program delivery. At the end of the pilot, school principals reported that student outcomes of attendance and behaviour had improved. Principals also suggested that more time was needed to plan for implementation and to communicate program goals to stakeholders. Recommendations were made for ‘Grab’n’Go’ as a simple and effective method of breakfast delivery and for securing sustainable funding for equipment. It was concluded from this pilot study that “[a] successful breakfast program is one that evolves from a ‘grass-roots’ level, within a provincial framework”, noting that “a provincial framework can identify basic provincial standards and guidelines, including food safety and nutrition requirements and program accessibility; however, implementation is to be designed locally to best meet unique needs” [67, p. 3].

## 2.4 Research Evidence for SBP Impacts/Outcomes

Research has shown that the undernourished and socially disadvantaged students benefit the most from SBPs, with marked improvements in cognitive performance through improved nutrition [14, 68-70]. However, as participation in SBPs has been shown to increase attendance [22, 71], this impact may indirectly lead to better educational attainment, improved socialisation and school connectedness leading to other positive outcomes of child wellbeing [21, 72]. A gold standard of SBP delivery is universal delivery whereby everyone in a school or class receives breakfast rather than targeting the disadvantaged [3]. In this way any stigma of receiving perceived ‘handouts’ is removed and all students benefit from participation in SBPs [73]. Further, the concurrent delivery of nutrition education aims to engender a culture of health behaviours that will follow the student through their future development. The following sections examine the potential impacts of SBPs on children’s nutrition and wellbeing, capacity for learning, and knowledge, attitudes and skills in relation to healthy eating.

### 2.4.1 Impact on Nutrition and Wellbeing of Vulnerable Children

The health benefits of eating breakfast have been long understood and are of predominant importance with respect to the healthy growth and development of children and adolescents [21, 74]. Research into SBPs supports the association between regular breakfast consumption offered at school and a better overall diet quality [55, 73, 75] where participants are more likely to meet their required intake of essential vitamins and minerals [22, 76]. This is particularly evident amongst the most economically disadvantaged students [22, 77]. Evidence from the USA shows that SBP participants are more likely than non-participants to consume fruit and dairy [78] with school meals being an important contributor to fruit intake among poorer students where over 50% of their daily fruit intake is consumed through the school breakfast [43, 79, 80].

In addition, findings from a nationally representative early childhood survey data in the USA reported that food insecurity was associated with poor developmental outcomes in children, including impaired social skills and reading difficulties, and thus is a meaningful indicator of childhood wellbeing [81]. Moreover, there is evidence that these outcomes are more pronounced in adolescents [82]. Participation in SBPs has also been found to be associated with lower levels of body mass index (BMI) [20], with regular breakfast consumption having protective factors against obesity [83]. Importantly, Mosehauer [as cited in 76, p. 70] asserts that “an improvement in dietary quality also may extend to the family members of children with access to the program”. Traditionally a target intervention for the disadvantaged, [84] studies have found that school meal programs can have a positive impact on the food security status of families in low income households [81]. In the UK, breakfast clubs were found to assist in reducing household food expenses as well as provide indirect support to the family economy since they offer free and reliable before-school childcare thus giving parents the opportunity to attend employment [51, 80].

The Australian Department of Education, Employment, and Workplace Relations defines ‘student wellbeing’ as “a sustainable state of positive mood and attitude, resilience and satisfaction with self, relationships and experiences at school” [as cited in 85, p. 2]. Feedback from students, teachers, and parents alike, across international studies into the impacts of SBPs indicate that they provide participants with positive interactions with peers [26, 28, 86-88]. This has been shown to encourage and promote social development and confidence [38, 51], with evidence that regular breakfast consumption contributed to school connectedness [25, 89] and psychosocial function [21, 68, 90].

### 2.4.2 Impact on Children’s Capacity for Learning

An impetus for establishing and maintaining SBPs (other than feeding hungry children) has been the apparent positive impact on educational outcomes [43, 73, 91-93]. In order for children to be able to learn, they must first be “ready and willing” [94, p. 119]. School connectedness or engagement is also a determinant of school performance [15, 25]. They need to be able to concentrate, memorise and comprehend; all key cognitive

processes needed to succeed at school [92]. All these factors play a part in influencing the ability to learn and have been shown to be facilitated by SBPs.

A recent systematic review linking dietary intake with academic achievement found there to be positive associations between regular breakfast consumption and academic achievement [24]. Specifically, breakfast provision to school students has been shown to facilitate their concentration, attention, comprehension and memory [72, 86, 91, 95, 96] with greater impacts shown in undernourished children [14, 68-70, 92]. This makes SBPs of paramount importance to the educational welfare of vulnerable or disadvantaged children.

A large scale randomised control trial in the UK found that universal free school breakfasts provided to disadvantaged students had a positive effect on their educational outcomes after only one year of the intervention [97]. Conversely, breakfast skipping has been linked with lower levels of attention [98], alertness and difficulty in problem solving/cognition and learning in school children leading to poorer educational outcomes [15, 68, 92, 96]. It must be noted that the majority of studies on the impacts of breakfast on cognitive function have been acute, indicating that breakfast consumption has a short-term positive effect [91] thus leading to the importance of consuming breakfast on a regular basis [99].

Qualitative evidence from principals, teachers and students alike has continued to describe perceptions that breakfast appears to improve students' energy levels, lifts their mood and allows them to be more engaged in the lesson [22, 23, 26, 100-102]. These benefits extend to the entire class by improving the learning environment for all students with less disruption, more learning time and engaged participation [23, 50, 97, 100].

Participation in SBPs has also been associated with improved attendance and reduced absenteeism [22, 71, 92] thereby having the potential for further positive impacts on educational outcomes through increased learning time [15, 92, 103]. Some studies have also shown participation to increase when offered in a universally free context [13, 93, 104, 105] and when offered after the start of school, [71, 84, 104, 106]. However, this appears to be more evident among economically disadvantaged students [106].

Quality of breakfast food served through SBPs has also been an area of research, indicating that a more nutritious and varied breakfast, including fruit intake [24] can make significant contributions to improved educational outcomes that are independent of socioeconomic status [107, 108]. Ptomey et al. [109] found that greater consumption of wholegrain foods as part of a school breakfast significantly improved results in reading and maths, validating a US mandate to align with national recommended dietary guidelines and include wholegrain-rich foods as part of the SBP menu [110].

### 2.4.3 Impact on Children's Attitudes to Healthy Eating

Certain behavioural theories suggest that attitudes and self-efficacy are predictors of behaviour [111], hence why many health interventions target such characteristics. A recent meta-analysis of 204 studies supports this premise and "indicates that interventions that successfully change these cognitions promote health behaviour change" [111, p. 1184]. Breakfast skipping is of particular interest as a health intervention. It is a common phenomenon among adolescents in developed countries (20-30%) [87, 91, 109, 112, 113] and particularly those with lower SES backgrounds [74, 114, 115], thus making them more vulnerable to poor health outcomes [51, 116]. Those who skip breakfast are also more likely to display other negative eating behaviours [74, 99], such as reduced intakes of fruit and vegetables and eating 'junk foods' of high caloric value often with high salt, fat and sugar [32, 63]. Children and adolescents who regularly consume breakfast, however, are more likely to display one or more healthy behaviours that contribute to better health outcomes [43, 99].



SBPs are an important and timely intervention that help students develop better eating patterns by supporting positive attitudes to eating through the provision of healthier food choices [15] and creating a social environment where students are positively influenced through teacher and peer mentors and role modelling of healthy eating [113, 115, 117, 118]. In a number of qualitative studies, students reported that they were willing to try new foods at school that they would not normally eat and liked the variety of foods offered [16, 26, 119, 120]. Interest in nutrition was also shown to increase significantly among nutrition intervention classes, along with a perceived confidence of being able to make good food choices [117, 121]

#### **2.4.4 Impact on Children's Knowledge and Skills in Relation to Healthy Food and Nutrition**

Good nutrition is paramount for healthy development and wellbeing of children and adolescents [118, 122]. Teaching healthy eating behaviours and habits at an early age is equally important as studies have shown that eating patterns developed in childhood are likely to continue through to adulthood [17, 121], thus reducing the risks of developing chronic diseases [21, 47, 123]. Additionally, research indicates that adolescents are susceptible to poor nutrition through environmental influences and engagement in poor health behaviours [39, 118, 123]. Children and adolescents who are more vulnerable or economically disadvantaged are also more likely to experience poor diet quality and health consequences compared with those of higher socioeconomic backgrounds [63, 74, 124]. Accordingly, with schools providing a consistent learning environment, and with the “potential to reach children of all ages with diverse ethnic and socioeconomic backgrounds” [17, p. 452], they are well positioned to promote nutrition education to children and adolescents [17, 18, 125] with SBPs providing an effective hands-on environment for learning healthy food choices and life skills [74].

School-based nutrition education programs that are multifaceted, including an experiential component, have been shown to significantly improve the nutritional knowledge of participants [117, 118, 121-123, 126-130]. Effectiveness of the interventions may have also been due to the targeted nature of the educative components. As Puma [123, p. 641] notes: “the greatest likelihood for food (and physical activity) behaviour change comes with the use of different age-appropriate learning strategies, the targeting of age-appropriate content material and messages over time, and an emphasis on changing the school environment to support the messaging of the nutrition education program. These strategies can be/have been applied to nutrition education activities associated with SBP.

#### **2.4.5 Impact on Human Capacity, Community Cohesiveness**

While it is evident that the consumption of regular breakfast, (facilitated by a SBP), can have a positive impact on psychosocial function [21, 68, 90]; certain aspects of this function such as behaviour and self-worth have been measured in relation to learning outcomes as an intended goal of SBPs, with poor psychosocial function shown to be an indicator of low academic achievement [131]. There appears however, to have been little focus on measuring the impact that an environmental context of SBPs can have on other variables of psychosocial function, such as peer relations, which can extend beyond the classroom to benefit the school as a whole [26]. Although perhaps unanticipated, there have been similar positive outcomes observed across evaluations into impacts of SBPs. These include promoting peer relations [26, 56, 119, 132] and other positive social interactions beyond immediate peer groups [28, 57, 133, 134], improving self-confidence [119] increasing sense of student responsibility [56, 134], role modelling of social skills [56], and a greater sense of community within the school [119, 134].

Researchers have recognised the need to confirm and quantitatively validate such outcomes [119] and have called for more “...comprehensive knowledge into the effectiveness of school breakfast, in the context of outcomes relating to the child, school, family and wider community” [52, p. 13]. The ‘Health Promoting School’ whole school approach recommends engaging parents and community in school-based health initiatives to help promote and support the development of health knowledge and related behaviours in

students [135]. A fundamental aspect of this framework is that this engagement between parents and school provides parents access to knowledge and skills in order to increase their own capacity for healthy behaviours [136] with the understanding that parental modelling has been shown to influence the eating behaviours of their children [39, 124].

The extant literature suggests that, despite recommendations, many schools have not been found to actively engage parents in school health programs or interventions [17, 34, 57, 137]. Involvement generally tends to be passive, acquired through newsletters or homework assignments [17, 34]. Schools often report time restraints as a common barrier to engaging parents [138, 139] and a recent analysis of parental involvement found that factors of time and associated pressures negatively impacted their perceived abilities to be able to provide healthy nutrition for their children [138]. Further studies have shown a potential lack of knowledge and skills also reduces parents' confidence and willingness to participate in school-based activities [139]. Schools need to address such barriers by creating opportunities that will assist parents to become actively engaged [17, 137]. SBPs may provide such an opportunity, giving parents a number of different aspects of the program which can help build capacity within the school and strengthen the outcomes of the program [Hyndman (2000) cited by 67, 138].

## 2.5 Sustainability of SBPs

Sustainability of SBPs targeting underprivileged or offered universally free is generally discussed with reference to the costs associated with providing the necessary ongoing resources including food supply and human capital. Lack of funding has been identified by many studies as a major barrier to the sustainability of SBPs [33, 56, 62]. In countries like the USA, SBPs are part of the school environment through national policy, and much of the required infrastructure is already in place from the National Lunch Program. The costs of maintaining this program are an issue insofar as participation needs to be maintained at a higher rate. This is because increased participation by economically disadvantaged students entitled to free or subsidised meals attracts more federal reimbursements for the school, enabling breakfast programs to be extended [112, 140].

Delivering innovative breakfast models (such as 'Breakfast in the Classroom' or 'Grab'n'Go') have proved to be successful strategies reducing common barriers to participation [71, 84, 104, 106] and delivering more accessible and convenient breakfasts, thereby meeting students' needs [119, 134]. Programs that are flexible and can be adjusted and individualized and are more likely to be incorporated into the school culture and hence maintained over time [141]. A program's ability to be flexible is also "...consistent with SBP expansion best practices" [Rainville & Carr (2008) cited in 134, p. 273].

A number of studies have determined that the availability, maintenance and succession of staff and volunteers is fundamental to the sustainability of SBPs [33, 56, 57, 62, 66, 80, 141, 142]. The provision of adequate staff nutrition education training is also important in enabling them to be better role models for students, and thus support the development of healthy attitudes, knowledge and skills in relation to nutrition [30, 66]. Schools that used a Health Promoting Schools framework found that by incorporating their health intervention programs and activities as part of the normal running of the school (business as usual) helped with the long-term sustainability of the program [18, 32]). This is consistent with Bundy's [31] assertion that "policy analysis ...shows that the effectiveness and sustainability of school feeding programs is dependent upon embedding the programs within education sector policy" (p. 19).

## 2.6 Satisfaction with School Breakfast Programs

Qualitative data on the impacts of SBPs come from a range of countries where the environmental, socio-cultural and political context of the schools may vary, and this can translate to differences in how SBPs are provided to students. Nevertheless, the reported benefits from stakeholders on the impacts of SBPs quite clearly overlap. In the USA, for example, studies examining barriers and facilitators of participation found



parents to be happy with SBPs as it gave them more time in the morning [95, 143] making them feel less stressed [112]. This view was similarly reported by parents in England from evaluations of a universal free school breakfast ([51, 52].

Students [52, 143], parents [112] and staff [52, 132] across most studies reported that SBPs worked well to alleviate hunger [86]. The social benefits of school breakfast participation were also commonly acknowledged [87] as being seen to create a positive environment in which to develop friendships and access broader peer groups [28, 51, 86, 144]. Students and teachers responding to impact studies on 'Breakfast in the Classroom' (BIC) [119] and 'Grab'n'Go' breakfasts [134] appreciated that they were accessible and convenient giving students a chance to eat if they were not able to arrive in time for a normal breakfast service. Teachers also found that BIC gave them an opportunity to discuss the significance of eating a healthy breakfast with the students [145] and provided a way to engage parents. For example, "... some parents who did not feel that they had a role in the school previously were now able to contribute by volunteering to assist with BIC in the younger grades" [119, p. 1703].

A unique evaluation of universally free school breakfasts in a deprived council within North West England, provided the perspectives of senior level stakeholders. They felt that the School Breakfast Club "demonstrates innovation and progressivity, i.e. dedication to the improvement of health and inequality" in their community [52, p. 4]. A further unifying theme, recognised across studies, that stakeholders considered the SBP as an essential part of their school system [51, 143] with most stakeholders from a newly implemented SBP believing it should be integrated into the school's wellness policy [100].

## 2.7 SBP Value for Money

'Value for money' is of particular interest to SBP funding bodies [146] who, in their responsibility to manage finances, require tangible evidence that the investments are being put to good use, meeting deliverables and providing outcomes. Value for money should be economic, efficient and effective, essentially minimising the investment on the appropriate resources while still achieving the best outcome [146]. At the same time, the concept of value for money must be equitable, ensuring the goods or services being provided by that investment actually reach all the people intended [146].

Determining whether a program is good value for money requires identification and quantification of the associated costs and benefits or outcomes [80], however, it is accepted that this is not always possible to achieve [147]. Often, value for money is intuitively assessed at the completion of pilot programs. For example, a recent breakfast club trial in the UK resulted in many schools electing to pay a small annual fee to receive food from the program provider plus advice and information on running breakfast clubs. Schools noted that this "represented good value for money...because it took away the need ...to organise and source food deliveries" [56, p. 82]. Very few studies have conducted a cost effectiveness analysis of school feeding programs, possibly because they are frequently limited by a lack of data necessary for such complex calculations, which tend to be beyond the schools' capacity to collect [14, 80, 148] or expertise in the appropriate methodology. Often, important inputs and outcomes are excluded, overlooked or not measured - such as the value of volunteers' time, or the social and behavioural benefits of SBPs that extend beyond the students to parents and the wider community and which cannot always be realised [80, 149] or quantified [150].

In 2014, a 'social return on investment' (SROI) analysis of Foodbank Australia operations was performed. SROI is a method for assessing value for money where social, environmental and economic costs and benefits are measured [146]. It was found that for every kilogram of food they provided to children through the SBP, \$110 in social value was created through the outcomes of improved learning, nutrition, healthy behaviours and social skills [9]. Similarly, a breakfast club run by the non-profit organisation, Daystar Foundation, was used as a case study for trialling the SROI method. Located in Minto, NSW approximately 500 children participated in the SBP [149]. Researchers found that for every dollar invested by Daystar, the social return

was equivalent to approximately \$7 where the outcomes were related to social savings from public health benefits and crime prevention [149]. Although SROI appears to be successful at translating social and environmental benefits into economic terms, due to its complexity and lengthiness, experts have recommended this type of analysis be performed independently from other program evaluations [See Appendix: SROI Case Study, World Vision Australia in 146].

Many studies have found that SBPs may improve children's learning capacities [91], support healthier eating habits [111] and develop positive behaviour and social skills [51]. For these reasons they may also have the potential to help reduce the ability gap between disadvantaged and advantaged children [Heckman (2008) cited in 101]. Arguably, SBPs could be viewed as an added value to the current investments made in education to ensure that money is well spent.

## 2.8 Improvement to Program Operation (Lessons Learned)

The lessons learned from other western countries with a long history of monitoring and evaluation of SBPs can provide valuable insight in helping improve the operations and outcomes of SBPs in Australia [110]. Program evaluation is an essential recommendation included in many SBP guidelines [3, 57, 66, 151]. It is intended that this process be incorporated in the regular operations for ongoing monitoring and improvement to ultimately meet the needs of the students [65, 151-153]. This process is also important to support a programs' sustainability [30]. "For ...evaluation to succeed, ...clear models of what outcomes are important and relevant are needed, as well as an understanding of the nature of and distinction between short and long-term outcomes and potential individual, institutional and societal benefits" [154, p. 436].

Despite the recommended 'best practice' of a universal-free SBP delivery to reduce stigma [2, 3] implementation evaluation shows the need to address other barriers to participation such as "time" in order to improve the reach to disadvantaged and vulnerable students [22, 155]. This was subsequently achieved by improving the accessibility and availability of the SBP to students through alternative models [2, 22, 134, 156, 157]. 'Grab'n'Go' has been reported as the most commonly used alternative breakfast model used in the USA [87] with most evaluation studies carried out in middle and high schools suggesting this model is popular with adolescents. [49, 95, 134, 156-158]. 'Grab'n'Go' is flexible to the needs of students, as they can pick up either pre-packed breakfast or self-select items from a central location or from a mobile cart which can then to be taken to eat in class or a designated area [22, 49]. Essentially, 'Grab'n'Go' can be made available in a timeframe which meets the students' needs [151, 159] and can also be adapted to suit the limited infrastructure and capacity of a school [22, 49, 56, 151].

A frequent lesson learned across most program evaluations has been the importance of effective communication with stakeholders, which needs to occur at different stages throughout program implementation to improve the functioning of SBPs [66, 119, 134, 160]. It has been highlighted that prior to the onset of a program, all stakeholders should be made aware of its need and value in order to obtain buy-in and support [2, 66, 144] as well to as address conflicting preconceptions of the roles and responsibilities toward feeding children [67, 133, 161]. Resources such as video clips, statistics and other research evidence have been suggested to help build communication awareness [133] including support to schools from local authorities in communicating to parents with English as a second language [66].

The involvement of expert partners can help build up a school's capacity in order to help improve the overall running of a SBP [2, 56, 66]. A successful pilot study, 'Partners for Breakfast in the Classroom' (PBIC) was undertaken in 2011 to implement a breakfast in the classroom program across five disadvantaged districts across the USA incorporating both rural and urban settings [2]. The partners consisted of two national education and two nutrition organisations who by using their organisational capacity and unique expertise were able to facilitate stakeholder collaborations among "... school administration officials, school food service staff, teachers, education support staff, students, parents, and community members" [2, p. 497]. The support for this program became wide reaching which led to a more successful and sustainable

implementation and operation [2]. The PBIC has expanded and currently runs breakfast programs in 35 school districts feeding over 63,000 students<sup>9</sup>. UK breakfast club evaluations similarly recommended that future programs should include expert involvement to “...provide expertise on the ground for ongoing support in the first year” [56, p. 8] with “partnership working...viewed as a key facilitator in the successful implementation of both the Scottish and English pilots of universal systems” [66, p. 47].

Legislated improvements to the nutrient quality of school meals in the USA has been achieved through consistent monitoring and evaluation and based on recommendations from national health agencies to comply with the latest national dietary guidelines [46, 162]. These improvements have led to increasing the availability of fruits, whole grains, and fat free and low-fat milk specifically in school breakfast meals while reducing sodium, saturated and trans-fat in order to “...better meet the dietary needs of school children and protect their health” [47]. Similar recommendations have come from the Dietitians Association of Australia spokesperson Kate Di Prima, “...the best breakfast for growing children is one that is high in fibre, contains low glycaemic Index options, and includes protein...The brain requires energy in the form of glucose to function at its best throughout the day. Nutritious breakfast foods such as grainy bread, breakfast cereals, fruit and milk provide healthy sources of glucose.” [163].

It has been the practice of a number of SBP providers in Canada and the UK to donate funds or access grants for equipment to schools participating in their program as they recognise the importance of appropriate infrastructure for the implementation and sustainability of SBPs [164, 165]. The US Department of Agriculture also provide grants for kitchen equipment needs as programs become extended [166]. Evaluations of a UK pilot to develop sustainable breakfast clubs gave recommendations to maintain small equipment grant availability if the pilot was to be extended adding that advice be given on how it these funds could be used [56]. Another study reported the investment in program equipment went on to benefit the whole school [66]. Private sector providers may also be a source of equipment sponsorship funds, but organisations and schools are recommended to consider and take appropriate steps to avoid potential conflicts of interest when involving food and beverage companies in school activities [37]. For example, a company producing sugar-sweetened beverages that offers to sponsor school-based activities or equipment, but requires the display of their logos or supply of their product, would be a conflict of interest.

## 2.9 Summary of literature review

The purpose of this literature review was to explore the characteristics and impacts of SBPs and NEPs, particularly on students vulnerable to poor diet and to examine the processes, successes and barriers of implementing such programs. As a result it aimed to identify best practices for successful implementation, sustainability and evaluation of programs, and to use these in the planning and interpretation of the current Foodbank SBNEP evaluation.

- This literature review has shown there is a continuum of objectives and formats for SBPs and that well supported and well implemented SBPs can achieve educational and community outcomes well beyond the ‘social good’ intentions of relieving hunger and improving the nutrition of food insecure school children.
- Educational outcomes attributed directly to SBPs include reduced student absenteeism, increased concentration, less behavioural problems and increased readiness to learn.
- The reported effects on nutritional status and educational outcomes were more pronounced for disadvantaged children, but a universal SBP that does not discriminate based on disadvantage is more successful in engaging needy children and building social cohesion and capacity within the school and wider community.

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<sup>9</sup> See <http://breakfastintheclassroom.org/press-room/press-releases/>

- Implementation, impact and sustainability are more successful if the SBP is supported by education sector policy, and is implemented in the school setting based on the three key elements of the Health Promoting Schools Framework, namely school ethos and policies, teaching and learning and whole community engagement.
- Integration of NEPs with SBPs has potential for more sustainable influences on food literacy, attitudes and healthy food choices.
- The review noted a wide range of operational characteristics that were influenced largely by availability of a suitable venue and facilities, sufficient personnel with appropriate skills, the range of foods available and the time available to prepare and serve it.—all ultimately driven by the community, financial and policy context in which they operated.
- Application of flexible solutions to suit the operational context was an important determinant of program uptake and sustainability, even if the ‘ideal’ service was not achievable.
- A trend towards increased government policy and funding commitment to SBPs was observed across several Western countries and states of Australia. This appears to be driving increased emphasis on quality standards, monitoring and evaluation.
- A range of SBP evaluation study designs and instruments have been implemented, however the selection of methods must be determined by the objectives of the program and will be influenced by the resources available.
- Evaluations that include process and impact data from a range of stakeholders can more readily explain the reasons for the results than just the effects alone.

## 3. Methodology

### 3.1 Design and Methods

The design of the SBNEP evaluation was directly informed by a program planning logic model developed by Foodbank WA in consultation with the SBNEP Reference Group. As shown in Table 3.1, the logic model establishes the context, need, inputs and resourcing for the SBNEP, and specifies the program activities and intended outputs and impact for children and the wider community. The SBNEP evaluation methods, research instruments, and research sample were therefore selected to elicit comprehensive evidence of each program activity and outcome and impact measure.

The diversity and complexity of school contexts within which the SBNEP operates, and the wide-reaching nature of the intended program outcomes, necessitated the use of multiple sources of evidence. A mixed methods approach drawing on both qualitative and quantitative measures was used in order to develop a more nuanced understanding of the factors that contribute to SBNEP outcomes and impact. In-depth case studies of individual schools were therefore used in conjunction with statewide program data. The evaluation requirements together with operational and ethical considerations relating to schools and the longevity of the SBNEP precluded the use of control or comparison groups to establish causality. Multiple sources of data were therefore crucial in allowing for a level of checking and triangulation of the findings. It was particularly important to ensure that the students themselves were given the opportunity to convey their perspectives on the value and impact of the School Breakfast and *Food Sensations* programs. This comprehensive use of qualitative data sources was informed by the findings of the systematic review of school-based nutrition promotion programs conducted by Wang and Stewart [30, p. 1098] who identified the value of qualitative data in “identifying problems, adjusting the intervention strategies, summarizing aspects of the programme and providing valuable experiences for future programmes”.

### 3.2 Data Sources and Research Instruments

The following sections provide a brief description of the data sources and research instruments used for the evaluation. Note that the *Food Sensations* evaluation instruments (for teachers and students) were distributed and collected by the Foodbank WA *Food Sensations* team before and after the delivery of *Food Sensations* sessions in schools. All other sources of primary data were administered by the ECU/TKI research team.

#### 3.2.1 Statewide SBNEP Data Sources

##### SBP Coordinator Survey

As part of the program monitoring and reporting requirements of the SBNEP Service Agreement, Foodbank WA seeks feedback from all registered SBP schools via an online survey sent to the Principal and/or designated SBP Coordinator. For the purposes of the independent evaluation, a more comprehensive SBP Coordinator Survey instrument was developed by the ECU/TKI team in consultation with Foodbank WA staff and the SBNEP Reference Group. Over the course of the evaluation, the SBP Coordinator Survey was administered three times (i.e. in Term 4 of 2015, 2016 and 2017) to all schools registered for the School Breakfast Program via the Qualtrics online survey platform. The survey questions covered operational details of the SBP, the impact of the SBP on individual students, classrooms and whole school community, and canvassed a range of other issues relating to improvement and sustainability of the SBP.

**Table 3.1: SBNEP Program Planning Logic Model**

<b>Context / Factors / Inputs / Resources</b>  <i>In order to accomplish our set of activities we will need the following:</i>	<b>Activities / Outputs</b>  <i>In order to address our problem we will accomplish the following activities and outputs:</i>	<b>Outcomes</b>  <i>We expect that if accomplished these planned activities/outputs will lead to participants benefitting in certain ways and to some extent:</i>	<b>Community Outcomes (Impacts)</b>  <i>If these outcomes for participants are achieved then, along with the outcomes of other programs in place, certain changes in organisations, communities or systems might be expected to occur:</i>
<b>Formative Evaluation</b>	<b>Process Evaluation</b>	<b>Outcome Evaluation</b>	<b>Impact</b>
<p><b>Policy context:</b> Alignment with a wide range of State Government policies and strategic document.*</p> <p><b>Need for program:</b> Children attending schools with low ICSEA and/or with a significant subset of students at risk of disadvantage are predisposed to food insecurity/poor nutrition outcomes, which can impact their ability to attend and participate at school.</p> <p><b>Evidence of what works:</b> As indicated through surveys of key school contacts, evaluation results and current research literature the provision of nutritious food, particularly at breakfast, can assist in improving student behaviour, school attendance and capacity to learn. Nutrition education can further improve the health attitudes, knowledge and skills of children vulnerable to poor nutrition.</p> <p><b>Program capacity inputs:</b> Existing relationship with 420 schools. Nutrition education leadership. Program staff inputs: 6.1 FTE Overall budget Year 1: \$957,857 (inc. GST)</p>	<ol style="list-style-type: none"> <li>1. Deliver school breakfast program to schools (up to 420 schools) with low ICSEA and/or with a significant subset of students that are at risk of disadvantage. This includes schools funded through Royalties for Regions.</li> <li>2. Deliver school breakfast program that includes perishable fresh foods (on a regular basis) in schools.</li> <li>3. Delivery of 67 nutrition education programs to schools participating in the school breakfast program. This includes schools funded through Royalties for regions.</li> <li>4. A 3-year evaluation of the SBNEP.</li> </ol>	<ul style="list-style-type: none"> <li>• Improved nutrition of vulnerable children.</li> <li>• Increased children's capacity for learning.</li> <li>• Improved children's positive attitude towards healthy food and nutrition.</li> <li>• Improved children's knowledge and skills in relation to healthy food and nutrition.</li> <li>• Sustainability of the program that better meets the needs of schools.</li> </ul>	<p>Increased human capacity and community cohesiveness in targeted schools and communities.</p> <p>(NB: This community outcome is measured as part of increased sustainability of the program. While other community impacts may be likely, such as those listed below, this is the only one that the evaluation will measure).</p> <p>This service will contribute to the following:</p> <ul style="list-style-type: none"> <li>• improved health and wellbeing of children vulnerable to poor nutrition;</li> <li>• improved educational, social and behavioural outcomes;</li> <li>• opportunities for the modelling of positive attitudes, behaviours and policies to healthy eating.</li> </ul>



## Food Sensations Evaluations

### Student Evaluations

Foodbank WA conducts pre/post student evaluations of *Food Sensations* sessions as part of its ongoing program monitoring. Following consultation with *Food Sensations* staff (metropolitan and regional teams), the ECU/TKI research team developed two new instruments targeted to students in Years 4-6 and Years 7-12. These instruments were piloted in late 2015 and used in schools throughout 2016 and 2017. The pre and post versions of the instrument contained the same sets of questions and included images/graphics to assist low literacy groups. The questions were all answerable via tick box or circling of alternative options, and covered demographics (gender and school year), and knowledge, attitudes and skills relating to healthy eating.

### Teacher Evaluations

Foodbank WA's ongoing program monitoring also includes feedback from participating teachers - collected via an evaluation sheet completed at the end of each *Food Sensations* session (i.e. post-test only). For the purposes of the SBNEP evaluation, minor adjustments were made to the evaluation instrument which was then piloted in late 2015 and used in schools throughout 2016 and 2017. Items covered the appropriateness of the session content, student enjoyment, effect on students' knowledge and attitudes towards healthy eating, support provided by Foodbank in organising the session, and intention to use the *Food Sensations* support materials within their own classroom teaching, as well as the opportunity to provide further comments and suggestions.

### Student Survey

For the purposes of the SBNEP evaluation, an online survey was developed to gather students' views about the School Breakfast Program and *Food Sensations*. Where appropriate, survey questions relating to the School Breakfast Program mirrored those used in the SBP Coordinator Survey and Stakeholder Survey (described below), though the language was modified to suit the target age group and graphics were used to aid comprehension and help sustain attention.

In 2017, all 428 registered SBP schools were invited to participate in the Student Survey via emails sent to the Principal. The research team then liaised with representatives from the consenting schools to customise processes for inviting all SBP students from Years 4-12 to participate in the survey and obtain active consent from the students and their parents/carers. The Student Survey was administered to participating schools during Terms 1-3 of 2017. Paper-based surveys were provided to several schools on request. The response rate for the Student Survey was low, and the reasons and implications of this are discussed in section 3.7.

## 3.2.2 Case Studies

Five schools were selected for in-depth case study in consultation with the SBNEP Reference Group. The schools selected reflect variation in student age-range, school size, geolocation<sup>10</sup> and region<sup>11</sup>, as well as differences in the way the School Breakfast Program operates. To ensure the confidentiality of the case study schools, throughout the report they are referred to by letter only (i.e. School A, School B, etc.). To follow are some high-level characteristics of the five schools. Further relevant contextual information is provided in section 4.2, however any specific details that may identify an individual school have been omitted or modified.

10 Geolocation refers to the locality of individual schools according to the following categories: metropolitan, provincial, remote and very remote.

11 Regions are based on the nine WA Regional Development Commission (RDC) regions, namely: Gascoyne, Goldfields-Esperance, Great Southern, Kimberley, Mid West, Peel, South West, and Wheatbelt. A tenth region, 'Perth', has been included to represent schools in the Perth metropolitan area.

- School A: Metropolitan, Perth, primary school, K-6
- School B: Metropolitan, Perth, senior high school, Year 7-12
- School C: Regional, Wheatbelt, district high school, K-10
- School D: Remote, Gascoyne, specialist Year 7-12 program within a K-12 school
- School E: Very remote, Kimberley, community school, K-12

Schools nominated as case study sites were invited to participate in the SBNEP evaluation via an email sent to each Principal, followed by telephone communication with a member of the research team. All five schools agreed to participate, so it was not necessary to select replacements. Procedures for identifying participants (i.e. staff, students, stakeholders) and distributing information letters and consent forms were negotiated with each school. The data sources and instruments used for the case studies are described below.

## Stakeholder Survey

An online survey was developed to gain stakeholders' views and perspectives of the impact and sustainability of the School Breakfast Program and *Food Sensations*. The definition of 'stakeholder' was taken to include members of school leadership teams (principals, deputy principals, learning area coordinators, etc.), classroom teachers, school chaplains, education assistants – including Aboriginal and Islander Education Officers (AIEOs) and Aboriginal Education Workers (AEWs), and other school staff, community members and volunteers that were directly associated with the School Breakfast Program and/or *Food Sensations*. For triangulation purposes, where appropriate the survey questions mirrored those used in the SBP Coordinator Survey and Student Survey. The survey was administered in 2017 via the Qualtrics online survey platform.

## Interviews

In each case study school, the research team aimed to interview representatives from the following groups: members of the school leadership team; the designated SBP Coordinator; teachers of students who attend the School Breakfast Program; staff/parents/volunteers who assist in running the School Breakfast Program; and students who attend the School Breakfast Program. In some cases, students were interviewed in groups rather than individually – depending on the school's preference and time constraints. The interviews covered issues relating to the effectiveness and impact of the School Breakfast Program and *Food Sensations*.

## Teacher Journals

Teacher journals were used to gather further information about the potential effects of attendance at the School Breakfast Program on individual students' attendance, punctuality, behaviour and productivity in the classroom. For each student whose parent/carer had given active consent, teachers were asked to provide feedback about the student on a regular basis (typically once per week) over one term with regard to their punctuality, concentration or focus, engagement, productivity (ability to get work done in class), and behaviour in class. A journal template was provided that included a series of check boxes relating to attendance at the School Breakfast Program and specific classroom behaviours, plus space to write comments and observations. Student Attendance and Report Data

Active parental and student consent was sought to obtain selected attendance and report data for students who attend the School Breakfast Program. This data supplemented the information gathered via the Teacher Journals. The dataset comprised individual students' records of school attendance, suspensions (if applicable), and attitude, behaviour and effort (ABE) ratings from school reports for 2015, 2016 and Semester 1 of 2017.

## 3.3 Mapping of Data to Research Questions

A summary of the data sources that were used to inform each of the research questions (re-worded as statements) is provided in Table 3.2. Although not shown in the table, findings from the initial literature review also informed the design, methods and data sources used for the evaluation.



### 3.4 Research and Ethics Approvals

To expedite the data collection and meet the SBNEP annual reporting requirements, the necessary approvals to conduct the SBNEP evaluation were obtained in stages. Ethics approval for the SBP Coordinator Survey and *Food Sensations* evaluations was received from the ECU Human Research Ethics Committee on 16 November 2015. Department of Education approval to conduct the research in WA Government schools was received on 26 November 2015. Approval to conduct the research in Catholic schools was received from Catholic Education WA (CEWA) on 7 December 2015.

Ethics approval for the Student Survey and case studies was received on 30 August 2016. The conditions of ethics approval required active informed consent from the parents/carers of participating students, and the students themselves. Following a series of discussions with the Department of Education's Evaluation and Accountability Directorate regarding the conditions of release for student records, approval to conduct these components of the evaluation in Department of Education schools was received on 6 October 2016. Data collection for the Student Survey, Stakeholder Survey and case studies was therefore conducted during Terms 1, 2 and 3 of 2017.

### 3.5 Summary of Data Collected

This section presents an overview of the data collected for the SBNEP evaluation. A breakdown of the population, sample size and response rate for the SBP Coordinator Survey and *Food Sensations* evaluations is presented in Table 3.3. The variable response rates for the SBP Coordinator Survey for 2015-2017 directly reflect the period of time available for schools to respond to each survey and hence the number of survey reminders that were sent. Excluding school holidays, the data collection periods were 3.5 weeks, 11.5 weeks and 7 weeks, respectively, for 2015, 2016 and 2017. These time frames were driven by annual reporting requirements. Similarly, the lower response rates for the 2017 *Food Sensations* evaluations are partly due to the reduced data collection period (i.e. Terms 1-3 only). Table 3.4 provides a breakdown of the total *Food Sensations* student sample by gender, school year, year group (primary versus secondary), geolocation and RDC region.

**Table 3.2: Mapping of data sources to the research questions**

Research Questions <sup>1</sup>	Online Surveys			Food Sensations Evaluations		Interviews				Individual Student Data		Other
	SBP Coord. Survey	Student Survey	Stakeholder Survey*	Teachers	Students	Staff*	Students*	Stakeholders*	FBWA <sup>2</sup> Staff	Teacher Journals*	Attendance/Behaviour*	FBWA <sup>2</sup> Sources
1. Improvement in the nutrition and wellbeing of vulnerable children												
2. Increase in children's capacity for learning												
3. Improvement in children's attitudes towards healthy food and nutrition												
4. Increase in children's knowledge and skills in relation to healthy food and nutrition												
5. Impact on longer term sustainability of the program that better meets schools' needs												
6. Increase in human capacity & community cohesiveness in targeted schools												
7. SBNEP Value for Money												
8. Factors (both positive and negative) that impacted on the implementation												
9. Program participants' satisfaction with the program												
10. Increase in levels of partnership and collaboration												
11. Future improvement to the operation of the program (lessons learned)												
12. Arrangements for performance monitoring and continuous quality improvement												

\* Data collected in case study schools only.

<sup>1</sup> For the sake of brevity, the research questions have been reworded as statements.

<sup>2</sup> FBWA = Foodbank WA

**Table 3.3: Summary of data collected for the SBP Coordinator Survey and *Food Sensations* evaluations**

Data Source	Population	Sample (useable data)	Response Rate
<b>SBP Coordinator Survey</b>			
2015 (SBP Schools)	414	157	38%
2016 (SBP Schools)	434	324	76%
2017 (SBP Schools)	428	241	56%
<b><i>Food Sensations 2016</i></b>			
Schools	73	50	68%
Teachers*	≥ 165*	111	≤ 67%*
Total Students	3,208	1,141	36%
Primary Students	2,748	973	35%
Secondary Students	460	168	37%
<b><i>Food Sensations 2017</i></b>			
Schools	71	27	38%
Teachers*	≥ 163*	67	≤ 41%*
Total Students	3,019	573	19%
Primary Students	2,780	519	19%
Secondary Students	390	54	14%

\* Foodbank WA does not record the total number of teachers involved in the *Food Sensations* sessions. Hence estimates of the teacher populations and subsequent response rates are provided based on the total number of *Food Sensations* sessions delivered and the assumption that at least one teacher per session was involved.

**Table 3.4: Distribution of the *Food Sensations* student sample**

Gender	N	%
Male	804	46.9
Female	894	52.1
School Group	N	%
Primary	1,449	87.0
Secondary	217	13.0
School Year	N	%
Year 3	79	4.7
Year 4	426	25.6
Year 5	591	35.5
Year 6	353	21.2
Year 7	41	2.5
Year 8	46	2.8
Year 9	42	2.5
Year 10	28	1.7
Year 11	44	2.6
Year 12	16	1.0

Geolocation	N	%
Metropolitan	942	55.0
Provincial	657	38.3
Remote	91	5.3
Very Remote	24	1.4
RDC Region	N	% <sup>1</sup>
Gascoyne	66	3.9
Goldfields-Esperance	20	1.2
Great Southern	79	4.6
Kimberley	-	-
Mid West	142	8.3
Peel	134	7.8
Pilbara	-	-
South West	107	6.2
Wheatbelt	263	15.3
PERTH	903	52.7
All Students	N	%
TOTAL SAMPLE	1,714	100

Table 3.5 summarises the data collection for the Student Survey, case studies (including the Stakeholder Survey) and interviews with Foodbank WA staff. For the Student Survey, useable data was received from only 4 of the 5 case study schools. For the non-case study schools, only 31 of the 423 eligible schools initially expressed willingness to participate in the Student Survey. Two schools subsequently withdrew on the grounds that the literacy requirements of the parent/carer and student consent form were too difficult for their school community. Only 8 schools were able to retrieve signed consent forms from parents and students within a reasonable timeframe, and a total of 52 student responses were subsequently obtained from those non-case study schools.

A breakdown of the Student Survey sample by school year, year group (primary vs secondary) and gender is provided in Table 3.6. As shown, most of the respondents were of primary school age in Years 4-6, and boys were somewhat more represented than girls.

The sample sizes for the case study schools were also highly variable. A range of factors influenced individual schools' willingness and ability to engage with the evaluation and persist with the challenging active consent processes. Such factors included changes of leadership, delays due to physical conditions affecting school operations, literacy levels of the school community, strength of school-community relationships, and the seniority and influence of the staff member delegated to liaise with the ECU/TKI team on the SBNEP evaluation. The response rate for the Stakeholder Survey was disappointing with only 20 responses received from across the five case study schools. All but one of the respondents were school staff or, in the case of

School D, staff employed by the specialist program operating within the school. One respondent was a volunteer worker at the School Breakfast Program (School A).

**Table 3.5: Summary of data collected for the case studies, Student Survey and interviews with Foodbank WA staff**

	Case Study Schools					Other Schools	Total
	A	B	C	D	E		
Student Survey	12	0	9	2	12	52*	<b>87</b>
Stakeholder Survey	4	2	4	2	8	N/A	<b>20</b>
Case Study Interviews:							
<i>Staff/Stakeholders</i>	10	2	3	4	17	N/A	<b>36</b>
<i>Students</i>	13	2	3	2	10	N/A	<b>30</b>
Teacher Journal (no. students)	10	0	1	0	15	N/A	<b>26</b>
Student Attendance Data	25	1	32	2	32	N/A	<b>92</b>
Student ABE Report Data**	25	1	28	2	32	N/A	<b>88</b>
Foodbank WA Staff Interviews							<b>9</b>

\* Students from non-case study schools.

\*\* Attitude, Behaviour and Effort (ABE) ratings from semester reports.

**Table 3.6: Distribution of Student Survey respondents by school year, year group and gender**

School Year	Students	
	n	%
Year 3	3	3.4
Year 4	14	16.1
Year 5	27	31.0
Year 6	32	36.8
Year 7	6	6.9
Year 8	2	2.3
Year 9	2	2.3
Year 10	1	1.1
<b>Year Group</b>	<b>n</b>	<b>%</b>
Primary school	76	87.4
Secondary school	11	12.6
<b>Gender</b>	<b>n</b>	<b>%</b>
Boys	49	55.8
Girls	38	44.2
<b>TOTAL</b>	<b>87</b>	<b>100.0</b>

## 3.6 Analytic Approach

This section provides a brief description of the analytic approaches and techniques used for the SBNEP evaluation.

### 3.6.1 Qualitative Data

All interviews were fully transcribed and subjected to thematic analysis based on the key research questions, and outcome and impact indicators specified in Tables 3.1 and 3.2. Responses to open-ended questions and comments provided in the various surveys (SBP Coordinator Survey, Stakeholder Survey, Student Survey, *Food Sensations* evaluation) were also analysed according to the key themes and indicators. Where appropriate, response categories have been quantified. Direct quotations from interview transcripts and survey responses have been used throughout the report to illustrate key themes and issues. Any information that would reveal the identity of an individual or a school has been anonymised or omitted.

### 3.6.2 Quantitative Data

Quantitative data generated from the surveys, evaluation sheets and attendance and behaviour data were analysed using SPSS Statistics software. For the most part, analyses were limited to descriptive statistics. Where appropriate (i.e. sufficient sample size, relevant to the research questions), non-parametric inferential statistics such as the Mann-Whitney U test were used to examine differences between groups for the Student Survey and SBP Coordinator Survey data. As the *Food Sensations* student evaluations were administered before and after each session, repeated measures inferential statistics (e.g. Wilcoxon signed ranks test, McNemar test for categorical data) were used (where appropriate) to determine whether observed changes from pre- to post-test were statistically significant. The significance level was set at 0.05, as is common practice in the social sciences. Where multiple comparisons were conducted on the basis of factors such as geolocation or region, a Bonferroni correction was applied in order to set a more stringent significance level.

## 3.7 Research Limitations

While all reasonable attempts were made to secure robust evidence for each of the activities and intended outcomes and impact of the SBNEP evaluation, there are inevitably limitations to the research. This is true of all research, but particularly so with education research for which the wide range of home, school, classroom and individual factors that impact on and modify students' behaviours and outcomes make it very difficult to isolate the effect of a single program. Limitations that should be kept in mind when interpreting the SBNEP evaluation findings and recommendations are outlined briefly below.

- **Lack of control or comparison groups:** We note that the use of control or comparison groups to establish causality was not part of the formal SBNEP evaluation requirements. As Phillips [167, p. 1] points out, "given the highly contextualized nature of educational processes, embedded in shifting complex social settings, and the relevance of all variables, very little education research is able to pursue predictive power". Schools' participation in the SBNEP is entirely voluntary and the flexible delivery model means there is great variability in the way it operates within schools, hence appropriate comparative data is difficult to define and retrieve. Since the SBNEP has been operating for several years in many schools, the ability to obtain pre-intervention data is limited. Ethical considerations must also be given high priority since it would be inappropriate to withhold the School Breakfast Program from a school that identified a need for it simply for the purposes of evaluation, even if only for a short period of time.
- **Self-report data:** A further limitation of the evaluation is the strong reliance on self-report data and the limited objective measures of program impact. Self-report data relies on individuals' recall of events and may be prone to social desirability bias (among other things) whereby participants are more likely to respond positively.

- **Low response rates for some data sources:** The requirement for active, informed parental consent for student participation in research<sup>12</sup> [168] has contributed to low response rates for the Student Survey and case studies, particularly among secondary students. This accords with the literature on school-based research, including research conducted in WA, which shows active consent procedures result in reduced responses [169-171], potentially biased samples [170, 172-174] and under-representation of older students, male students, vulnerable students [169, 171, 174, 175] and those most in need of health education interventions [175]. As Esbensen et al. [176] point out, the role of school personnel is of crucial importance in gaining reasonable response rates in school-based research. The level of commitment and 'buy-in' to the research, school-community relationships, and staff access to parents/families are important factors affecting response rates. As noted in section 3.5, such factors are at least partly reflected in the varied response rates obtained from the case study schools.

Low response rates for some data sources had implications for the type of analyses that could be conducted and hence the conclusions that can reasonably be drawn from the evaluation, as described in the following dot points.

- **Limited group comparisons:** The small number of SBP students represented in the Student Survey meant that group comparisons were limited to dichotomous variables, such as gender, age/year group (Years 3-5 vs Years 6-10) and frequency of attendance at the School Breakfast Program (frequent vs infrequent). Comparisons between more diverse groupings, such as region and geolocation, could have provided further insight into the impact of socioeconomic status and other demographic indicators on student outcomes. A larger sample size would also have provided greater confidence in the findings related to the observed trends for the dichotomous groupings.
- **Potentially biased samples (Student and Stakeholder Surveys):** Small samples are more prone to bias. Hence, it is possible that those who chose to participate in the Student Survey and Stakeholder Survey were more positive about the SBNEP than those who did not participate. Hence, the results from these surveys may be an overestimation of the likely benefits of the program. As noted above, active parental consent procedures also result in biased samples due to underrepresentation of key groups.

Despite these limitations, we believe the measures built into the evaluation design allow for an acceptable level of confidence in the veracity of the data. Where possible we have attempted to minimise the effect of these limitations through the use of repeated measures (e.g. SBP Coordinator Survey and *Food Sensations* evaluations) and triangulation methods.

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<sup>12</sup> See Chapter 4.2 of the *National Statement on Ethical Conduct in Human Research 2007 (updated May 2015)*.

## 4. School-Based Operation of the SBNEP

EQ1: What factors (both positive and negative) impact on the implementation [of the SBNEP]?

### 4.1 School Breakfast Program - Flexible Delivery Model

The School Breakfast Program is the acknowledged cornerstone of the SBNEP. It provides schools with breakfast food products to feed hungry students and is the mechanism by which schools can access the *Food Sensations* nutrition education program and obtain additional supplies of fresh fruit and vegetables for initiatives such as the *Crunch&Sip*<sup>13</sup> program (if applicable). Unlike some school-based feeding programs, the WA School Breakfast Program uses a flexible delivery model to enable schools to tailor the program to their specific needs. As described in the *Foodbank WA School Breakfast Program Toolkit* [177, p. 20]:

*There is no one 'correct' method of running a School Breakfast Program. The ongoing sustainability of this type of program within a structured environment such as a school is largely dependent on the flexibility of the program. Foodbank WA has always seen its role as a facilitator of the SBP and a resource provider, providing the food products and a network of information and resources to support the growth of the program within the school.*

Evidence gathered from the SBP Coordinator Surveys (2015-17) and case studies clearly shows that Foodbank WA's SBP delivery model is sufficiently flexible for schools to adapt it to their unique needs and contexts. The operational approach adopted by an individual school is necessarily influenced by a range of factors that include, but are not limited to, the strategic focus of the SBP and extent to which it is integrated with school planning and curriculum development, the level of staff buy-in and commitment to the SBP, and the strength and nature of the relationships between the school, its families and the wider community. Figure 4.1 attempts to illustrate this interplay of factors. We note that other factors are also relevant (such as physical space, school budget, etc.), but these are typically considered by schools in determining the rationale and strategic focus of the breakfast program.

*...the school promotes an atmosphere of safety, [and] family and home behaviours which unite the students in a large age range. The philosophy of the school is to provide a holistic and quality education within a family community-centred context in order for children to become lifelong learners. The...School Breakfast Program is part of the learning and teaching curriculum with the teachers involved, while the local parent workers and volunteers gather at [the SBP venue] and supervise children as part of being interested in education themselves. (SBP Coordinator, Kimberley, Very Remote)*

The degree of complexity and variation in school breakfast programs seen among the 400-plus SBNEP schools precludes the development of a simple SBP 'typology'. However, it is possible to identify several key aspects of breakfast programs and continua of implementation that illustrate the flexible nature of SBP delivery in WA schools. Figure 4.2 presents these continua grouped in terms of the strategic focus and integration of the SBP in schools (i.e. 'what' schools want to achieve by implementing the SBP and 'why') and the operational characteristics of SBPs that reflect 'how' the strategic focus plays out in practice. The 'program rationale' continuum reflects the extent to which schools implement the SBP as a stand-alone intervention to alleviate hunger, or as part of a broader strategy to effect change or build capacity within the school. The program rationale in turn influences the level of integration of the SBP within school planning and curriculum, the extent of the school's focus on student

<sup>13</sup> *Crunch&Sip* is a school-based program that aims to increase awareness among primary school students (and their families) about the importance of eating fruit or vegetables and drinking water every day.



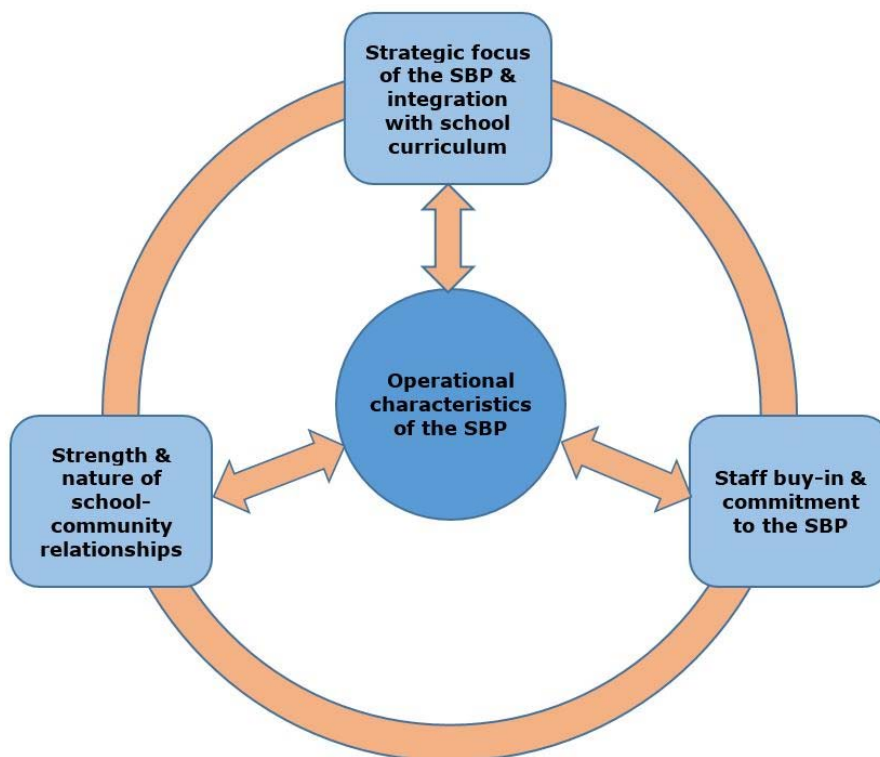
health and wellbeing, and the level of inclusivity of the SBP (e.g. whether it is targeted to particular students only, open to all students, or extended to all students *and* their families).

*Breakfast club continues on a Friday for all students, but we now formally offer breakfast to our Aboriginal students on Monday, Tuesday and Wednesday as well as Friday. (SBP Coordinator, Perth, Metropolitan)*

Each implementation continuum shown in Figure 4.2 has important resourcing and organisational implications, and schools report that they adapt and change this over time to reflect the changing needs of the school community. For example, a school may choose to expand the program from twice per week to every day in order to address increased levels of food insecurity within the community, or increase student involvement in the running of the program in order to reduce the demands on staff and volunteers and contribute to students' organisational and self-management skills.

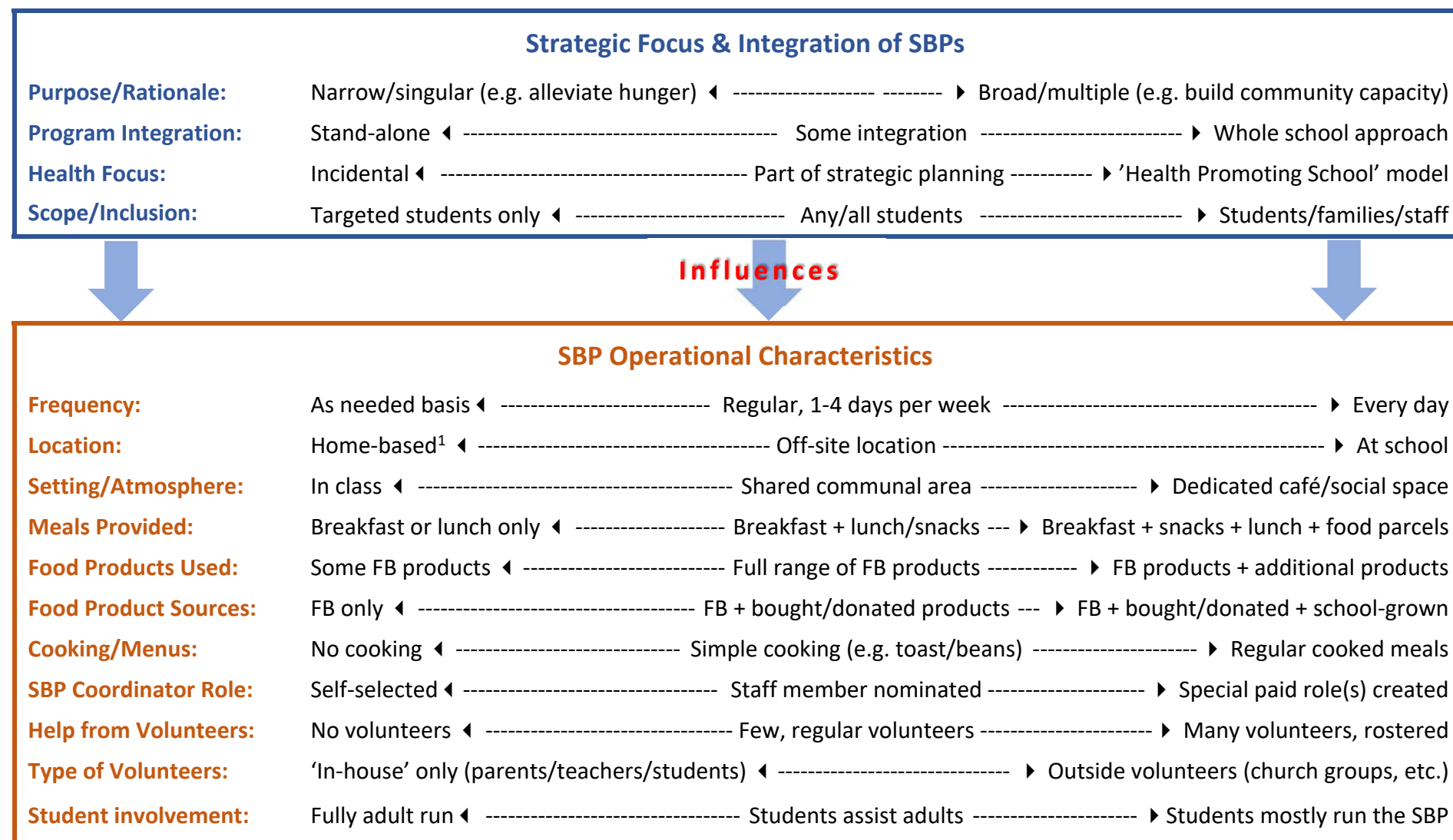
*We are currently making improvements to the program to ensure that we are also building student skills and understanding - life skills of making their own food and making healthy choices. (SBP Coordinator, Perth, Metropolitan)*

**Figure 4.1: Factors that influence the implementation and operational characteristics of School Breakfast Programs in WA schools**



In the following sections we flesh out some of the key factors that help and hinder the implementation and ongoing operation of school breakfast programs. This is followed by a series of vignettes based on the five case study schools that provide a more holistic view of the ways in which school breakfast programs are implemented to suit the needs and context of specific communities.

**Figure 4.2: Key characteristics and implementation continua of School Breakfast Programs in WA schools**



<sup>1</sup> At least one remote community school provides breakfast products to families in need so they can 'continue to be the provider for their children and share the meal with them'.

## 4.2 Factors Affecting the Implementation and Ongoing Operation of SBPs

This section draws on evidence gathered from the SBP Coordinator Survey over three years to highlight the key factors that schools identify as affecting the implementation and operation of their breakfast programs. Many of these factors will be examined in further detail in later sections that consider the improvement and sustainability of the school breakfast programs.

### 4.2.1 Staffing of School Breakfast Programs

The extended hours, increased workload and additional facilities and equipment that SBPs require can place considerable pressure on schools. It is hardly surprising then that staffing of breakfast programs is the most significant and prevalent issue for schools. While many (> 50%) schools rely on staff volunteers to coordinate and run the program, others assign the responsibility to particular staff roles, such as school chaplain, education assistant or canteen manager. Approximately 10-12% of schools have elected to create a new paid staff position specifically to run the breakfast program in order to reduce the impost on teaching staff and help ensure sustainability.

*We have regulars [volunteers] who support the program - sometimes we run short staffed, but students request the opportunity to help. We also have Admin staff who volunteer as back up when regulars are off sick, etc. (SBP Coordinator, Perth, Metropolitan)*

More than half of the SBP schools rely on assistance from outside their own teaching, administration or pastoral care staff to be able to establish and maintain their program. Parent volunteers are a common source of help for many schools (> 40%), and there is an increasing trend for schools to involve SBP students and other student volunteers in running the program. In 2016 only 32% of schools indicated they enlist the help of students, compared to more than 55% in 2017.

*The students set up breakfast club, make breakfast then clean up and pack everything away. There is a roster for each day so the jobs are shared between all. (SBP Coordinator, Wheatbelt, Provincial)*

Outside volunteers are used in approximately 20% schools, and their assistance is reported as a being crucial. In a few cases, the breakfast program is completely run by outside volunteers, such as local retirees, a church group, or local branch of a charity.

*The Rotary Club is coordinating one day each week, providing 3 volunteers to run the breakfast. (SBP Coordinator, Great Southern, Provincial)*

Difficulty recruiting sufficient volunteers was consistently identified by schools as a barrier to expansion and improvement of the breakfast program (58%, 33% and 34% of schools in 2015, 2016, and 2017, respectively). A common reason is the general busyness of people's schedules and the fact that many parents work full-time or are caring for young children. Schools with large migrant populations report difficulties of language barriers, while remote communities experience additional challenges due to their isolation and seasonal weather conditions and cultural factors. A small number of schools report difficulties in enlisting volunteer support because of negative attitudes among some sections of their parent communities.

*Low socio-economic area. Some parents lack confidence working with others. 46 languages in the school, many parents feel they lack language skills to communicate clearly. (SBP Coordinator, Perth, Metropolitan)*

*No-one wants to commit. Others believe that the parents should be providing the food before the children come to school. (SBP Coordinator, Goldfields-Esperance, Very Remote)*

While it is important to acknowledge these difficulties, they are not universal. Some schools cite the strong involvement, commitment and reliability of volunteers as a particular strength of their breakfast program.

*[Our SBP] is run and driven by teachers, community members and parents. Our volunteers are always reliable and everyone is there because they care about the welfare of the students at our school. (SBP Coordinator, Great Southern, Provincial)*

### 4.2.2 Time Constraints

Closely related to the issues of staffing are the restrictions on staff time due to work contracts and conditions and interference with teaching preparations (17-21%). As noted earlier, breakfast programs are often coordinated by support staff such as the school chaplain. Where the nominated coordinator only has a part-time role at the school, the program is typically limited to that staff member's work days. Where teaching staff have main responsibility for the program, this tends to be less problematic in terms of frequency of the program, but can interfere with teachers' classroom preparations and readiness to commence the first lesson of the day. This is particularly so in schools where breakfast is served in a teaching area. The requirement for teachers to be in classrooms by 8.30am or earlier is often an added impetus for schools to utilise volunteers and/or non-teaching staff.

*Time constraints for teaching staff and EAs [Education Assistants] to assist and still get to their classrooms on time. (SBP Coordinator, Wheatbelt, Provincial)*

*The school chaplain is only at the school 2 days a week. The breakfast program would be run more days a week if the chaplaincy time could be increased. (SBP Coordinator, Perth, Metropolitan)*

*Limited staff numbers on certain days. Breakfast space is a classroom that needs to be used immediately after breakfast, can't be too elaborate with cooking or preparation. (SBP Coordinator, Great Southern, Remote)*

### 4.2.3 Facilities and Equipment

Inadequate space, facilities and/or equipment to run the breakfast program were cited by 17-21% of schools as impeding the operation of the breakfast program and limiting their ability to expand and make improvements. This encompassed issues such as the inadequate size of areas used for food storage, preparation, serving, and/or eating, lack of access to hot water and kitchen facilities, and insufficient capacity of cooking appliances to cope with heavy use.

*We serve breakfast on a verandah. No room for sitting around tables for social interaction. Limited possibility to involve children in chores. (SBP Coordinator, South West, Provincial)*

For many schools, the physical space in which the breakfast program is held is given high priority because of the recognised benefits that flow from establishing a suitable venue. Having a dedicated space that does not need to be packed up/unpacked for each session greatly reduces the time pressure on staff, volunteers and participants. Creating a pleasant environment in which breakfast is served is seen as part of a wider remit to enhance student wellbeing and build social relationships. Accordingly, upgrading of facilities and equipment was one of the commonly cited areas of improvement made to breakfast programs in the period 2015-2017.

*Students love breakfast club. They are made to feel important, they are served with dignity and have good, positive social interactions with the team. Students line up to come to [our] Café. The décor is special and reflects the time of the year. Students participate in the atmosphere and behaviour in the Breakfast Club is excellent. (SBP Coordinator, Perth, Metropolitan)*

#### 4.2.4 Funding and Financial Implications

A small number of schools (7-18%) attributed lack of funding as a hindrance to their ability to expand or improve the operation of their breakfast programs. Access to external funding and/or greater allocation of school-based funds were seen as necessary to improve facilities and equipment, purchase additional food products, or employ dedicated staff to run the program. Two schools made special note that operating the School Breakfast Program every day – particularly when made available to all students – can affect the financial viability of school canteens which may in turn have negative consequences for the whole school.

*Equipment used to prepare breakfast will need to be replaced in the not too distant future. As the only other assistance received other than Foodbank comes from the school, we can only operate while this continues. (Remote, Goldfields-Esperance)*

#### 4.2.5 Limited Variety of Foods and Menus

In part related to the factors listed above, some schools noted that the narrow range of products and menus used at their SBP limited the nutritional value of the breakfasts provided and also the appeal to students. They acknowledged that the school could try to source more fresh foods, provide hot meals more regularly – including making better use of the baked beans and spaghetti accessed from Foodbank WA, and/or introduce greater diversity in menu options. However, each of these changes was seen as requiring greater time commitment from staff and volunteers, more willingness to engage with local businesses and charities to enlist their support, a bigger budget allocation for the SBP by the school, and/or improved facilities for preparing and/or cooking food.

*In breakfast club we need more variety of food to pick from (Year 5 Student, Student Survey)*

#### 4.2.6 Promotion to the School Community

Some schools (≈12%) identified the need to more heavily promote the breakfast program in order to secure greater support or 'buy-in' from the school community – including attracting more volunteer helpers to run the program. A few schools highlighted issues of reduced student attendance at breakfast club – despite there being a recognised problem of food insecurity within the community. This was attributed to a potential stigma or sense of shame for children and/or families who need to access the Breakfast Program, or families merely not knowing that the service was available. Schools that recognise the problem of stigma typically take steps to alleviate this, including widening access to the program to all students. This issue will be explored further in later sections of the report.

*We have made a large effort to de-stigmatise the school breakfast club program. We still have a number of staff who don't understand the research that the more open it is to everyone, the more the students who need it the most will come. They do share with others that Breakfast Club is only for needy students, so then the stigma is hard to shake completely. (SBP Coordinator, Perth, Metropolitan)*

*We always promote our Breakfast program to our students and their families so they know that their child can come to school with having the support from our staff to ensure their child can get something to eat without feeling shame. (SBP Coordinator, Perth, Metropolitan)*

### 4.2.7 Whole School Approach

Schools in which the breakfast program is included in strategic planning or part of an integrated, whole school approach to student health and wellbeing are less likely to report negative or problematic aspects of implementing and running the program. Rather than being seen as an additional burden on staff time and resources, the program is positioned as being an opportunity to demonstrate the school's ethos and to nurture relationships between students, staff, families and community members. Such schools face the same issues of needing to source and allocate sufficient funding and resources to run the program. However, the integrated approach helps break down initial staff resistance and over time builds greater staff commitment and community engagement. This in turn opens up a wider range of options for resourcing and running the program. Having a whole school or integrated approach is a crucial factor in determining the level of 'value add' that the School Breakfast Program can bring to the school community, and hence is explored in more detail throughout the report.

*Daily Breakfast Club is an integral part of our whole school operations. It is a cornerstone of our pastoral care, providing an opportunity at the beginning of the school day for staff to assess the mood, preparedness, health and attitude of students. It provides an opportunity for relationship building, mentoring (both active and silent) and the provision of practical support: [it is] more than just breakfast. It provides the opportunity for students to learn important social skills and table manners. The Breakfast Club is seen as a refuge. Operating Breakfast Club and having it manned by school staff each day sends the strong message that healthy eating and individual students are valued in our school. (SBP Coordinator, Great Southern, Provincial)*

## 4.3 School Breakfast Programs in the Case Study Schools

The following sections draw on data derived from the case studies to illustrate the differing role of breakfast programs in WA schools and the contextual factors that influence their implementation and operation. Table 4.1 provides a colour coded comparison of the operational characteristics of the five case study schools based on the characteristics and continua outlined above in Figure 4.2. The colour coding presents achievement of the low range of the continua as white, mid range as light blue and upper range as dark blue.

This shows that regardless of geographical location, all case study schools were able to achieve mid-to upper level on the implementation continua for most of the key SBP operational characteristics. All schools achieved the upper level of implementation for the range of food products offered and all but one school reached the upper level for frequency of breakfast delivery. All but one school offered the SBP on the school site, with another also providing breakfast products to families so that the meal could be consumed together.

The characteristics showing greatest variation were the availability and type of volunteers and the level of student involvement in the delivery of the breakfast. The contexts in which these variations arise is outlined in the case studies which follow.



**Table 4.1: Operational characteristics of the School Breakfast Program in the five case study schools**

	<b>SCHOOL A</b> Metropolitan, K-6	<b>SCHOOL B</b> Metropolitan, 7-12	<b>SCHOOL C</b> Provincial, K-10	<b>SCHOOL D</b> Remote, 7-12	<b>SCHOOL E</b> Very Remote, K-12
<b>Purpose/Rationale:</b>	Build community cohesion; Meet student hunger needs	Meet student hunger needs; Social support of vulnerable	Meet student hunger needs; Social support of vulnerable	Meet student hunger needs	Meet student hunger needs Promote student health
<b>Program Integration:</b>	Whole school approach	Whole school approach	Some integration	Some integration	Whole school approach
<b>Health Focus:</b>	Highly integrated; embedded in strategic planning	Focus on student wellbeing	Focus on student wellbeing	Focus on student wellbeing	Highly integrated; embedded in strategic planning
<b>Scope/Inclusion:</b>	Students, families, staff	Any students	Any students	Any students	Any students
<b>SBP Frequency:</b>	3 days (Mon, Wed, Fri)	5 days	5 days	5 days	5 days
<b>Location:</b>	At school in designated area	At school in designated area	At school in shared classroom	Offsite	At school in designated area.
<b>Setting/Atmosphere:</b>	Dedicated area with tables, chairs, running water	Shared teaching space with industrial kitchen and food service area	Shared classroom three days per week and communal wet area 2 days per week.	Dedicated area 3 days per week and shared communal area 2 days per week	Purpose build dedicated area with tables, bench chairs and undercover area.
<b>Meals Provided:</b>	Breakfasts, emergency meals, family packs when needed	Breakfast and emergency lunches	Breakfast and emergency lunches	Breakfasts and emergency meals	Breakfast, lunch, and emergency meals
<b>Food Product Range</b>	FBWA products plus eggs, juice, bread/rolls	FB products plus additional protein foods, carbohydrate foods, spreads and drinks	FB products plus additional carbohydrate foods, spreads and drinks daily, and occasional fresh fruit	FBWA products 3 days per week, plus additional protein foods, carbohydrate foods, spreads and drinks 2 days per week	FBWA products plus additional protein foods, fruit and vegetables, carbohydrate foods, spreads and drinks
<b>Food Product Sources:</b>	FBWA & donations	FBWA products and school purchases	FBWA products, donations and school purchases	FBWA products & school purchases	FBWA products, donations and school purchases
<b>Cooking/Menus:</b>	Cold breakfast 2 days: Cooked breakfast 1 day (Fri)	Cooked breakfasts 4 days (Mon- Thurs)	Breakfast – toast/spreads only; Emergency lunches – toasties (tinned beans & spaghetti)	Cold breakfast 3 days, cooked breakfast 2 days (Tues & Thurs)	Breakfast + cooked lunch 5 days
<b>SBP Coordinator Role:</b>	Classroom teacher + Deputy Principal, nominated	Head, Hospitality teaching program	School chaplain	Included in staff member's role	Paid community members
<b>Help from Volunteers:</b>	Regular staff volunteers	Regular rostered student volunteers & student services staff. Once weekly church youth group volunteers.	Aboriginal liaison officer & regular community volunteers	Nil	Paid community members
<b>Type of Volunteers:</b>	School teaching staff & education assistants	Students volunteer & receive credits to Cert II qual. Student services staff & church youth group assist chaplain duties.	Senior community members from local churches; Long term participants	Nil	Teachers and Aboriginal education assistants
<b>Student involvement:</b>	Some assistance from students	Year 12 Hospitality students cook & serve breakfast 4 days per week under teacher supervision	Ad hoc student assistance in simple food preparation	Students heavily involved on cooked breakfast days, otherwise some assistance.	Some assistance from students in preparation and clean up.

Colour coding: White-low range of continua; Light blue-mid range of continua; Dark blue-high range of continua



### 4.3.1 School A

#### Overview

School A is a metropolitan primary school located within a low socioeconomic community with a high level of cultural diversity. The SBP operates 3 days per week on Monday, Wednesday and Friday and all students and their families are welcome. Up to 100 students per day typically attend from a total student population of around 400. The operation of the SBP is very streamlined and involves a classroom teacher as the SBP Coordinator, and the Deputy Principal who has general oversight of the program. SBP starts at 8:00am and finishes at around 8:45am. Staff, including three education assistants and volunteers arrive at school at 7:15am to set up and prepare breakfast. SBP operates in a permanent undercover space and wet area set up for food preparation with permanent benches for students and guests to sit and eat. The main tasks of the SBP Coordinator include looking after the budget, ordering product, checking the storeroom and coordinating the staff and volunteers.

On Mondays and Wednesdays, a typical basic breakfast of cereal, toast, tinned fruit and milk is served. On Fridays, a cooked breakfast is provided that typically incorporates baked beans and spaghetti, and occasionally eggs. Most of the food used in the SBP is sourced from Foodbank WA with periodic donations of bread/rolls and juice from local businesses. Several times throughout the year the school puts on 'special breakfasts' that are linked to school events and initiatives. The food sourced for the SBP is also used in food packages for families in need and to make sandwiches for students who do not have lunch.

School representatives were in strong agreement that the food offered at the SBP is of good quality with a variety of healthy food options supplied. All stakeholders saw this as a key factor in the success of the program. The school has also invested considerable resources and energy over a long period in establishing the SBP as a 'community event' that is welcoming of all students and their parents/caregivers. Parents, students and staff alike felt that there was no stigma or sense of shame attached to attending the SBP and this contributed to strong attendance by both students and parents. All agreed that the 'community culture' that has developed around the SBP has contributed to a high level of impact for the school.

*In terms of the community, it is as much about "come in, enjoy, have a bit of a social interaction with each other". We know the community we are in, as nutrition is not always high for some families, so it's ...about providing that opportunity for them and easing that pressure without us placing a judgement or value on whether they are being fed at home or not being fed properly... So really it is pushed as a community program and it's "everyone come along". Parents come along and join in breakfast, and anyone [can] come along which has been the main emphasis of it...so very positive and very much embraced by the staff here. (Principal, School A)*

*Definitely like the program to continue. It is a really good program and one of the most important the school offers and should be in every school. (Parent, School A)*

#### Factors Affecting Ongoing Operation of the SBP

Stakeholders described the SBP at School A as a very 'slick' operation - very well organised and run. Having a dedicated teacher as the SBP Coordinator, and school staff and volunteers who are willing to commit their time to support the program, were seen as major contributing factors to its success. The staff and volunteers arrive at school very early on three mornings per week to set up the SBP. This represents a substantial time commitment, particularly since many have their own children and other dependents to attend to before school. Having a permanent location for the SBP was also identified as contributing factor to its success.

*Definitely having the key coordinator and having her as a full time staff member who is very experienced and well known across the school has been hugely beneficial for us. The other Deputy plays a significant role as well. We have very dedicated and interested EAs. Having these key people on board each week has played a huge role in its success. (Principal, School A)*

The SBP is strongly embedded within the school's ethos and strategic planning. As described by the Deputy Principal, "we give it a high profile and is a 3 day a week proper event within our school". At the community level, the SBP was seen as important in building a sense of community and cohesion. Its success in doing so was evidenced by the "considerable numbers of parents and grandparents at the school on SBP days" (SBP Coordinator). Parents developed greater respect for the school staff who put in additional time in order to run the SBP.

*Passionate staff categorically work at the school for a reason and this is integral to the kids. Everyone is prepared to pitch in and help. (Parent, School A)*

*Teamwork from staff, they show a lot of teamwork which reflects back to the students as well so they are showing the students how to do team work. (Parent, School A)*

From the running of the SBP, other partnerships with local retailers and not-for-profit organisations have resulted in the donation of products such as bread and juice, and volunteer support for the SBP which has been beneficial to the school. Excess food is taken to the nearby parent and child centre and distributed to families in need.

A key challenge for the school in running the SBP was "getting two staff to go for a whole afternoon to source product at the times they (Foodbank WA) are open" (Deputy Principal). The 4-hour round trip (including unloading), plus the need to cover these staff whilst away from the school, was seen as a considerable investment. Another issue raised by the Principal was the workload implications for staff given that their level of commitment was already very high.

*Workload for staff and burn out for staff and how we can reward staff for the extra effort. Always concerned as lots of the same staff doing the same things. We always have to review how it is going and look at ways of changing it up. (Principal, School A)*

An issue raised by parents and students was they would prefer the SBP to be offered five days per week rather than three. Parents acknowledged that this would place extra burden on the school and school staff, but felt the benefits made it worth considering.

*It should be open every day, because maybe kids are really hungry in the morning. (Year 6 Student, School A)*

The SBP was seen to be "very sustainable and something that is ingrained in the school". The leadership team noted that if "we were not there to run it, other staff would come in and take over", further demonstrating its significance to the school. Staff, parents and students alike acknowledged the SBP as "a real positive in building connections with the kids and their families". There was unanimous support for the SBP continuing and many stakeholders expressed they could not imagine the school without it.

*Staffing is an issue at times when people are away and EA's can't be in the class. But overall the benefits outweigh the negatives, so we adapt because it is so important. (Teacher, School A)*

*It's great and we are lucky we have it at school and we all think it should keep going. (Year 6 Student, School A)*

*Other students at other schools should have it as well. (Year 6 Student, School A)*

### 4.3.2 School B

#### Overview

School B is a metropolitan high school located in an outer suburb of Perth with a student population of over 600. Until 2017 the SBP was run by the Chaplain and student volunteers one day per week in a cottage at the entrance to the school. In 2017 it was moved to the newly built Hospitality centre in the centre of the school. This houses an industrial kitchen and seating area for meal service.

Up to 100 students typically attend the SBP per day. Monday to Thursday it is operated by volunteer Year 12 hospitality students, under the guidance of the Hospitality Program Head teacher at the school. The students plan the menu, taking into account budget, foods and facilities available as well as student preferences and portion sizes. They draw up and work to a roster to prepare and serve a cooked breakfast each day. They receive credit towards a Certificate II in Hospitality.

This arrangement frees up the Chaplain to spend more time with participating students, playing board games with them, building relationships and checking on their welfare. The Chaplain still runs the SBP on Fridays assisted by volunteers from a local church group, and occasionally staff from Student Services, but the menu is limited to cereal with milk and Milo.

*Well, this year I've been able to a lot more interact with the kids, with the students, so having that consistent help from the students in the school in the kitchen has allowed me the freedom to be able to get out of the kitchen and into the dining area, so just get to build relationships and check in with kids that catch my eye that I might need to check in to see how they are. (Chaplain, School B)*

SBP starts at 8:00am. Student helpers or the Friday volunteers arrive at school at 7:30am to set up and prepare the breakfast. Peak time is 8.15am when the buses arrive. Cooking and drink preparation finishes at 8:30am although service continues until the bell at 8:45am or until all prepared food is consumed. Bread and surplus non-perishable food is saved for children without a lunch on that day.

A simple, quickly prepared hot dish is available four days per week; typically toast with baked beans, spaghetti, toasted ham and cheese sandwiches, or eggs (usually French toast) plus hot milk Milo. Students may self-serve cold cereal (muesli), canned fruit and milk. Non-perishable food is sourced from Foodbank WA. Milo, milk, bread and other perishable foods are accessed from local suppliers using school funds or donations. Food and drinks are served with disposable plates, cups and utensils to minimise washing up.

*It just allows them the space to warm their bellies with the hot Milo and just, you know, drop off the outside world for a bit and become kids just for those moments playing those games and having a laugh, and then they are happy, when the bell goes, to go off to class. (Chaplain, School B)*

*That's the biggest thing they've got here, if you don't say please and thank you, then you do have to go back to the back of the line, because we like using manners here. (Year 12 Hospitality Student, School B)*

The SBP coordinator, the Chaplain and student volunteers all agreed that the SBP was a valuable service to the students who attended, not just to provide food for those who would otherwise start the school day without nourishment but also providing a safe space with support, peer group inclusion, social interaction and social skills training.

Both the Hospitality Program Head teacher and the Hospitality students noted the benefits of

*- Yeah, I did learn a lot, I learnt how to prepare in a certain amount of time, and had to communicate with my customers.*

*- I learned that all the kids have good manners. Yeah, they say, "Thank you" and "Please" and that, they're all very nice.*

*- Like, we've been just giving... providing breakfast for them kids, like they have breakfast.*

*- Hmm-hmm, yeah, and not only that, like it's a great experience, for us, like it's we're actually working*

*- Yeah, it helps you communicate.... communicate with others.*

*- Builds your confidence, and things like that...And how you cooperate in the kitchen. (Focus Group, 3 x Year 12 Hospitality Students, School B)*

their involvement in the SBP. The student volunteers expressed pride in their contribution, noting the reward they felt in helping others and the cooking and hospitality industry skills, confidence and work readiness they had consequently developed.

### Factors Affecting Ongoing Operation of the SBP

The new facilities and links with the Hospitality Program mean that the SBP can be offered every day of the week. The food preparation and service is more streamlined, speeding up breakfast service in the limited time available, and reducing queuing and associated behavioural problems.

More students sit down to eat because they have the facilities. They also have space to do homework. The chaplain and teachers from Student Services have more time to socialise with the students, allowing them to identify potential social and emotional problems as well as those without lunch on the day.

*You can pump out the food a lot quicker so you don't have the line-ups, the waiting, the behavioural issues of people trying to jump in or anything else, so they can just come and grab their stuff and sit down. (SBP Coordinator, School B)*

However other teachers are less involved because they now see the SBP as a hospitality program activity and responsibility. Involvement of the Hospitality students also reduces the need for parent volunteers, which had been problematic in previous years due to unreliable attendance, the need for Working with Children Checks and Police Clearances, and conflict between families. The Chaplain recognises the benefits of community involvement and has recruited a small core of volunteers from a local church youth group to develop relationships with socially disadvantaged students.

*It might be the only conversation they have in the week where someone actually stopped and said, "How are you going?", and I think that Breakfast Club allows that space to do it, yeah. (Chaplain, School B)*

Student helpers expressed the view that the service should run until the bell goes at 8.45 am to allow late comers to access food. However this creates problems with cleaning up in time for students and the Coordinator to reach class in time.

Both the co-ordinator and the student helpers identified problems with rubbish around the school linked to disposable cups used by the SBP. Students also noted waste due to half consumed items which they attributed to the rush for latecomers to consume foods before classes started. Both students and coordinator agreed that signs, education and constant reminders were needed to reduce the waste.

*I walked to one of my classes, right here, they throw the cups of Milo in the garden, I thought, "You wasted \$10.00 on a tin of Milo and probably fifty cents of Milo, and probably a twenty cents meal," so that's a dollar they're wasting of the school's funds. (Year 12 Hospitality Student, School B)*

Perishable items such as bread and milk are sourced from local suppliers. The SBC coordinator currently picks these up but given the volume and physical effort involved, sees a need for these to be delivered to the school in future.

### 4.3.3 School C

#### Overview

School C is a provincial K-10 school located in the Wheatbelt region of WA with a student population in excess of 250. The SBP operates in the school daily from 8:30-8:50am as a sit down meal in a designated classroom 3 to 4 days per week and a Grab-and-go in the wet area outside this classroom 1 or 2 days a week. It is co-ordinated by the school chaplain and staffed by one or two community volunteers and one rostered teaching staff member. The school Aboriginal Liaison Officer attends 2 days per week, with older primary students helping on an *ad hoc* basis.

The SBP is open to all students, with attendance of 30 to 50 students per day, most of these from the primary years. Some have not eaten before school whilst others have had breakfast at home but bus to school early so they are hungry by the time they reach the school. A small number attend for the social connection.

The menu is guided by student choices, and after over 12 years operation at the school has settled on toast with various toppings, mainly margarine with Vegemite or jam, plus orange juice and milk to drink. Baked beans and spaghetti supplied by Foodbank are used in toasted sandwiches to feed children who don't have lunch. Latecomers for breakfast or those who appear hungry in class are also catered for in the student services area. School teaching staff and administration are aware of the 'unsettled' effect of hungry students in the classroom.

The school Principal and Chaplain complete the food orders from Foodbank. This includes milk, Vegemite, beans and spaghetti, orange juice, occasionally bread. Otherwise supplies are purchased locally by the Chaplain using school funds and fruit is donated by local growers or supermarket.

Most of the small core of senior citizen volunteers has been attending for over 12 years. Their help to prepare and serve the food relieves the Chaplain to mingle with the children. The Chaplain views the SBP as an important way to get to know the children. Equally, the volunteers benefit from contact with the children and the children learn to communicate with adults in the community.

*Food Sensations* sessions including a parent event were delivered at the school within the last two years. Parent attendance was low but the classroom lessons were reported by the Assistant Principal as well received and remembered by children.

## Factors Affecting Ongoing Operations

The SBP was started about 13 or 14 years ago by a parent-teacher, and has been going ever since. The chaplain, the volunteers and support from Foodbank for selected products are critical elements. The chaplain organises the food and volunteers for the SBP. The chaplaincy is five days per week, with three days funded by the community, mainly two local churches which are also the main source of longstanding volunteers. Only one parent and one grandparent regularly volunteer.

The school could access a wider range of Foodbank WA core products, but have elected not to due to storage and preparation. Toast and milk were said to be preferred by the children and the easiest options to offer. Apples and other types of fruit are accessed from local providers and parent donations. The school budget was said to be 'tight' and 'getting tighter' but the administration was confident that if needed parents would 'kick in' help to meet shortfalls.

*Some people question the jam, but you know, a lot of kids don't eat Vegemite so our choices are limited, we can't have Peanut Butter, we can't have Nutella, we can't have those things with nuts in, so yeah, the only other option really is jam. And the teachers would rather the kids were fed; they're not worried about the little bit of sugar they're having. (Chaplain, School C)*

*.... I'd like to see the Weet-Bix and stuff come forward too, but they just don't eat them, you know. They are a lot who will, yeah, they're just hungry - well, it's not wasted but we're better off with the toast because it's quick and it's easy. (Aboriginal Liaison Officer, School C)*

*I think there's definitely a social aspect to it. There's a whole "this is the way that you treat adults that you don't know" with the volunteers, and a lot of them are older people, and yeah, manners, please and thank you, you know, which some of them don't get at home. For me, it helps ... it's another avenue to get to know the kids. (Chaplain, School C)*

*Enjoyment of being with the young kids, everyone's talking to them and you know, asking them problems and asking all about themselves, and I mean, you know what old people are like with kids, they love kids. (Aboriginal Liaison Officer, School C)*

*Occasionally parents will drop in a couple of loaves of bread, but yeah, probably not often enough to pick up on the shortfall, but if we think all of a sudden we said, look, we've run out of money, I think parents would kick in. (Assistant Principal, School C)*



Key challenges for the school in running the SBP were identified as lack of storage space and the need to use a working classroom to serve breakfast. The latter was seen as important in providing a place for students to sit down to eat their breakfast and encouraging them to socialise. Numbers are going up and queuing was one of the few complaints primary students expressed about the SBP.

The arts classroom was chosen as the venue because it is a common area familiar to all students. The Aboriginal Liaison officer also conducts art classes open to all at lunchtime each day as a means of social support and to ensure that all eat lunch. However the venue is in the primary school area which some staff suggested may deter older students from attending. Equally using the home economics room with cooking facilities would deter younger students.

*I was talking about having a permanent home, you know, if we used the home ec room I don't think the little kids would feel comfortable. It would be nice to have a pancake morning or do something different but it's just not practical up there. (Chaplain, School C)*

The general consensus amongst staff was that the SBP was sustainable in its current format but it would be improved and meet the needs of more students if it had a permanent space with a wet area rather than a class room and easier access for all students. This would allow more social engagement of students and their increased participation and education related to food preparation, service and cleaning up. It may also attract more parent and community involvement, which the Aboriginal Liaison Officer suggested should include the Police and service clubs like Rotary and Lions to develop better understanding and relationships with community youth.

#### 4.3.4 School D

##### Overview

School D is a remote secondary school located in the Gascoyne region. It caters for a substantial proportion of students of Aboriginal heritage. The SBP operates five days per week at an offsite location (but very close to the school), with typically 30-40 students in attendance. On two of the five days, cooked breakfasts are provided after early morning sports training, and this typically sees the SBP operate at full capacity.

The operation of the SBP is co-ordinated by a paid staff member, and this work is included as part of their job description. On the cooked-breakfast days, several other staff members are also required to assist as part of their school role. Currently there are no parents or other volunteers involved in helping with SBP at the school. The main tasks of the SBP co-ordinator included ordering product, managing the SBP budget including purchase of locally-sourced products, and maintaining the storeroom inventory.

Breakfast is generally available from 7.30am, with students able to come into the offsite building and access breakfast for themselves in the form of cereal and toast, while the SBP Coordinator monitors the students. On the very popular cooked breakfast days, the students are fully involved in the preparation, cooking and clean-up. Breakfast commences once the early morning sports programs has finished under the supervision of the SBP Coordinator and several other staff. Once students have moved on to their class for the day, the SBP foods can be accessed for any child who has since arrived at school without breakfast, or is just hungry, at any time during the day.

*If there are any kids who are a little bit unsettled during the day, you might have a bit of an extra chat with them and make sure they're going into the classroom a bit more calmly, I guess. And yeah, we also get a chance to discuss, like, a little bit of nutrition and also some table manners and etiquette and that sort of thing, making sure that you're lining up to get your food and doing all your dishes after the meal and doing your own drying up. (Teacher, School D)*

Both staff and students agree that having breakfast available at the school, and as required during the day, was an important factor in getting the children to come to and stay at school. It is not always clear whether children have eaten prior to coming to school in the morning, however the results of providing breakfast are evident to the school staff who work with the children on a daily basis. The staff at this school operate with the premise that children who are not hungry will be more settled in class, concentrate better, and be better behaved. At this school, the class teachers and SBP Coordinator work together to identify any children during the day who may need to be fed, send them to the offsite SBP facility, and then return them safely to class. In this school's context, the SBP is successfully used as an intervention to provide the best possible learning environment for children by modifying factors that are within the reach of the school.

The SBP also provides an important avenue for school staff to build supportive relationships with the students, and develop a sense of community within their school. The School Coordinator remarked that this is extremely important in a remote town, as it gives them a chance to get to know the children personally and understand their individual circumstances, as parents and families have not generally been able or willing to be involved in many school activities. Overall, the SBP helps students feel that school is somewhere that is consistent and reliable and a good and safe place to be.

*Yeah, because when I've had a feed I feel more like going to school... and I can't think with an empty stomach. (Year 8 Student, School D)*

*It's a really good way to just build relationships with the boys, like, all the staff members are here at breakfast so obviously the students who are running the training session, they come in with the other kids and they all sit down together and it's a chance to build relationships with them. (Teacher, School D)*

### Factors Affecting Ongoing Operation of the SBP

No major negative factors affecting the ongoing operation of the SBP were noted. At School D, the SBP is run by school staff whose designated roles include duties relating to the organisation and daily operation of the program. The fact that the SBP is held offsite at another property located near the school may have perhaps hindered some students from participating in the program on a more regular basis. However, this has been addressed with the upcoming re-location of the SBP to a new school building. The SBP is seen as operating smoothly to the point that it is part of the students' regular school day, and heavily embedded in the daily operations and running of the school.

#### 4.3.5 School E

##### Overview

School E is a very remote K-12 school located in the Kimberley region of WA in a remote Aboriginal community. The long established SBP operates 5 days a week with all students at the school welcome. On average there are 30 breakfasts a day served, but numbers can vary depending on time of year and the overall school attendance. The operation of the SBP is very streamlined and involves paid staff to run the program which is overseen by the school principal who has general oversight of the program. It has its own dedicated under cover space within the school including outdoor tables and is part of a wider school feeding (hot lunch) service that the school provides.

The service starts before school between 7:15-7:45 which is timed around the two bus runs each morning to pick up students and operates till the start of school. A typical breakfast each day consists of cereal, toast, tinned fruit, baked beans and spaghetti and juice and has a roster of student 'duty' to help with some preparation and clean up. The SBP joins onto the morning sport program which facilitates punctuality and attendance. The Principal commented that it is a good opportunity for him/her to touch base with students first thing in the morning to find out what is happening and to monitor their well-being.



There was overwhelming agreement that the food offered at the SBP was 'high/good' quality. This was seen as important by all stakeholders and a key factor in the success of the program. It is clear that the SBP is very much embedded into the fabric and functioning of the school and community.

Within the school it is clear that not every student has food before coming to school and the SBP enables students to be fed which enables brain function and facilitates learning. At the classroom level there was a positive impact on students' capacity for learning, particularly their ability for increased concentration and positive social interaction. The Principal emphasised that the reading and literacy gaps in students learning were closing and that Foodbank and the SBP have a "direct impact on this".

*And we know that if kids don't have a feed then the day's just very long and very hard, until they get a feed at lunch time, and it's a long time. Lots of our kids won't have had much of a meal in the evening, so breakfast is pretty important, they probably haven't had much since lunch the previous day, for whatever reasons. I don't really understand how that works, but often kids, you talk to kids, and you say, "Oh, what did you have for dinner last night?" "Oh, a cup of tea and damper," which probably isn't really enough for growing kids, so breakfast sort of takes on even more significance, and we don't always have heaps of food around the place within community, so it's always there as a back-up. At least we're getting 30% of our kids we know that they've had a feed, they go into class, so there's a chance that we might get some learning going on. (Principal, School E)*

At the community level, the SBP contributed to the overall feeling of community and the school being a "safe place" that is there to back up parents and caregivers in a consistent manner. Foodbank was described as "part of our school culture and well-being development within and across the school" and links in with other inter-agency programs to support students including ear health as an example.

### Factors Affecting Ongoing Operations

A major positive factor identified by all stakeholders as influencing the operation of the SBP was the paid staff positions that guaranteed its operation 5 days a week. The understanding of Foodbank and its staff and the regular contact was also seen as a major help.

There were no major hindrances to the SBP identified. Reliability of staff in the past was a factor but not in the last 18-24 months. The SBP coordinator was also seen as a major help to the program and its success.

*Yeah, and they're paid staff, but, you know, there will be other AETs who will come and give a hand at different stages because they've not got anything to do, or they might want a bit of toast, so they'll make a bit of toast for some kids as well. We never have any problem with getting it going. There's never a labour shortage or anything like that. We don't have volunteers from community coming in and do it. It is paid staff, because we want to be consistent. We wanted to make sure that ... and there's got to be consistency, and certainty about these things, that it is there every day. I think Foodbank do a really job. They communicate well, they plan well, they give us plenty of information. (Principal, School E)*

At the community level the SBP was seen to develop a sense of community but not in a typical fashion experienced in other contexts. Given the community's all family related, the friendship component that may bring students together in other contexts was not quite the same. It was seen as an impact but not as much as it would in other places: "I know in lots of other schools, it would be groups of friends coming together in the morning, and that might encourage more kids to come to school. I'd reckon there'd be a proportion of kids who get up and go, "Oh yeah, I'm really hungry. Oh, yep, if I go to school, I'll get some food," but it's hard to know how much. Because our community's all family related, I don't think that friendship component is quite the same, but it would be a player, you know, whether it's 10% or 15%, a bit hard to guess, but not as much as it would be in other places, that's for sure".

The SBP was seen in this remote context as a way to connect within, between and across community but also with outside agencies both government and not-for-profit. The SBP was seen to be very sustainable as quoted by the School Principal: "We can go on ... we've doing this for 15 years. We can go on for another 15 years

pretty much in the same vein, it really depends on what Foodbank can support us with, and provided that keeps going, we'll keep working at the way it is".

## 4.4 Summary / Key Points

- The School Breakfast Program delivery model is sufficiently flexible for schools located across all geolocations and regions of Western Australia to adapt it to their particular needs and community context.
- The approach adopted by an individual school typically reflects the degree of integration with school strategic planning and curriculum development. This strategic focus both influences, and is influenced by, the level of staff buy-in and commitment to the SBP, and the strength and nature of school-community relationships.
- More restrictive, utilitarian approaches are typically adopted by schools where the strategic focus is on alleviating hunger among a targeted group of students. More inclusive, resource-intensive approaches are typical of schools where the SBP is embedded within a whole school approach to improving student wellbeing and/or building community capacity.
- Schools may adapt their SBP over time, moving to a more integrated approach if/when they see evidence that it is bringing wider social and educational benefits to the school community than merely meeting students' nutritional needs.
- The operational characteristics of SBPs in WA schools can be described on a series of continua that include the frequency of operation, location/setting of the SBP, meals and menus provided, use of volunteers, nature of the SBP Coordinator role, and level of student involvement in running the SBP.
- Staffing is a key factor affecting the implementation and ongoing operation of the SBP in schools. More than half of the schools rely on volunteers (i.e. other than school staff) to help run the program. A few rely solely on volunteers to run their SBP.
- The physical space and facilities/equipment available to run the SBP are seen as a critical factor in aiding or hindering its operation. Having a dedicated space and pleasant environment in which to serve breakfast is seen to be of particular importance where the focus is on fostering social relations and creating a sense of community.
- Staff buy-in and commitment to the SBP is more evident in schools where it is part of a whole school approach to health, wellbeing and/or community relationship-building.
- Stigma or sense of shame attached to needing the SBP hinders student participation in some schools. However, there are many examples of schools successfully widening access to the program to encompass all students, thus breaking down community resistance.
- Detailed insights gained from the case study schools support the evidence from the research literature that there is no single 'one size fits all' model of best practice.

## 5. Access to a Nutritious Breakfast by Vulnerable Children

EQ1 Has there been an improvement in the nutrition and wellbeing of vulnerable children?

### 5.1 Introduction

In this chapter we present a range of evidence regarding the effectiveness of the School Breakfast Program in providing access to a nutritious breakfast for vulnerable children. It draws on data sourced from Foodbank WA School Breakfast Program registration records (2015-2017), the SBP Coordinator Survey (2015-17), Student Survey, and case study schools. We note that the SBNEP evaluation did not seek to measure the actual nutritional intake of children participating in the School Breakfast Program.

### 5.2 Support for Vulnerable Children

The School Breakfast Program is especially targeted to vulnerable students whose ability to engage with schooling may be adversely affected by their exposure to various risk factors. As described in Chapter 1, the registration process for the School Breakfast Program requires schools to identify the main risk factors and groups of at-risk students within their communities. A summary of these is provided in Table 5.1. The most prevalent risk factors (i.e. >70%) nominated by schools in the 2015-17 period were Aboriginal or Torres Strait Islander heritage (particularly in remote and very remote schools), family dysfunction, family food insecurity, and poverty. Risk factors of cultural and linguistic diversity and homelessness were much less prevalent overall, but more commonly reported in metropolitan schools. As would be expected, students at risk because of transport difficulties (e.g. long journeys to/from school) were more common within remote schools.

An important indicator of the level of disadvantage in the SBP school communities is the ICSEA<sup>14</sup> decile rank, where 10 represents the lowest 10% of the population. Schools with an ICSEA decile of 6-10 automatically qualify to access the School Breakfast Program. Schools with ICSEA decile ranks of 1-5 require more substantial justification of their need to

*This program provides food for students who otherwise wouldn't eat that day and is an essential process in student learning. (SBP Coordinator, Mid West, Provincial)*

*It is an excellent program that gives me, as Principal, the peace of mind that every child in our school gets nutritious food a couple of times a day. (Principal, Kimberley, Very Remote)*

*It shows the school takes a holistic approach to improving the wellbeing of the students. For some students, recess and lunch would have been a horrible time, watching others eat while they go hungry. This basic human need has been met. (SBP Coordinator, Perth, Metropolitan)*

*Breakfast club is a good thing because when kids have no food at home they come to school and eat breakfast at school. (Year 8 Student, Kimberley, Very Remote)*

*Some [students] have FIFO (single) parents. Others are themselves living on the streets while others have parents cut off Centrelink payments, in prison or sick. No food in the house and other children besides themselves to feed. Provision of food may prevent young people being involved in crime that could lead to incarceration. Food packs delivered to the home help ease the urgency of the situation. Sometimes we also provide baby packs as well as there are very young (adolescent) parents living in meagre circumstances. (SBP Coordinator, Perth, Metropolitan)*

<sup>14</sup> Index of Community Socio-Educational Advantage.

participate in the School Breakfast Program. The mean decile rank for participating schools was 7.8 and 7.9 respectively in 2016 and 2017<sup>15</sup>. Almost half of the SBP schools had decile ranks of 9 or 10. Since geographic location is factored into ICSEA calculations, the mean decile ranks were higher for more isolated schools (e.g. 2017: metropolitan = 7.2, provincial = 8.0, remote = 8.2, very remote = 9.7). Some schools were careful to note that socio-economic indicators do not necessarily paint an accurate picture of the level of disadvantage within a community. Hence, it is important that Foodbank WA continues to allow schools from higher socioeconomic areas to make a case for accessing the School Breakfast Program.

*At the moment [we're] living on one payment...one Centrelink payment, and trying to provide everything you need for the whole family [of 6 children]. So this [SBP] is actually...this really does help out. (Parent, School A, Perth, Metropolitan)*

*We have SBP and...volunteer our time and put resources to feeding needy children in middle class areas, not just low socio economic areas. Mining turndown has affected our families greatly, but government stats don't show this. (SBP Coordinator, South West, Provincial)*

**Table 5.1: Percentage of schools that identified particular groups of vulnerable children in need of the School Breakfast**

Student Groups	2015 %	2016 %	2017 %	Geolocation Differences <sup>1</sup>
Aboriginal or Torres Strait Islander heritage	79	72	80	↑ Remote & Very Remote
Refugee <sup>2</sup>	23	-	-	↑ Metro
Cultural & linguistic diversity <sup>2</sup>	-	30	35	↑ Metro
<b>Students at Educational Risk (SAER)</b>	<b>79</b>	<b>95</b>	<b>100</b>	Similar for all geolocations
SAER – Poor attendance <sup>3</sup>	-	82	85	Similar for all geolocations
SAER – Poverty <sup>3</sup>	-	80	79	↑ Metro & Provincial
SAER – Homelessness <sup>3</sup>	-	21	28	↑ Metro
SAER – Transport <sup>3</sup>	-	36	39	↑ Remote
SAER – Family dysfunction <sup>3</sup>	-	85	87	↑ Metro
SAER – Family food insecurity <sup>3</sup>	-	78	83	Similar for all geolocations

<sup>1</sup> Geolocation groups = Metropolitan, Provincial, Remote, Very Remote. Arrow ↑ indicates higher proportion(s) of schools.

<sup>2</sup> Category of 'refugee' replaced with 'culturally & linguistically diverse' in 2016.

<sup>3</sup> New SAER categories introduced by Foodbank WA in 2016.

Source: Foodbank WA annual SBP registration data.

### 5.2.1 Distribution of SBP Students

Data collected by Foodbank WA via the annual registration process shows that more than **17,500 students** per year were assisted by the School Breakfast Program from 2015-17 (mean = 17,667 students). As noted earlier, Foodbank WA exceeded its capacity to assist schools in 2017 due to increased food costs and placed a ceiling on the number of schools registered. We can therefore expect further growth in the number of participating schools and students if the SBNEP funding base and contractual requirements are expanded in the future.

In terms of geographical location, the numbers of SBP students in metropolitan and very remote schools have fallen somewhat over the 2015-17 period, while numbers have increased in provincial schools and fluctuated

<sup>15</sup> 2015 has been excluded since more than 60 schools had not been allocated an ICSEA score or decile rank.

in remote schools. As shown in Table 5.2, within the RDC regions (plus Perth), numbers have steadily increased in Peel, Pilbara<sup>16</sup>, South West and Wheatbelt, and fallen in Goldfields-Esperance, Kimberley and Perth. Numbers in the other regions have fluctuated. Arrows are used in Table 5.2 to indicate the direction of change in SBP student numbers over the 3-year period.

**Table 5.2 Distribution of SBP students by RDC region**

RDC Region (plus Perth)	2015 N	2016 N	2017 N	Change from 2015 to 2017 <sup>1</sup>	Mean % of SBP Schools 2015-2017
Gascoyne	272	117	261	↕	1.2
Goldfields-Esperance	1,214	1,183	1,142	↘	6.7
Great Southern	424	408	470	↕	2.5
Kimberley	2,048	1,864	1,570	↘	10.3
Mid West	946	765	808	↕	4.7
Peel	992	1099	1016	↕	5.9
Perth	8,829	8,729	8,413	↘	49.0
Pilbara	283	404	426	↗	2.1
South West	1,495	2,118	2,209	↗	11.0
Wheatbelt	1,101	1,126	1,268	↗	6.6

<sup>1</sup> Arrows indicate the direction of change in numbers, where ↘ = decreased from 2015 to 2017, ↗ = increased from 2015 to 2017, ↕ = fluctuated.

Source: Foodbank WA annual SBP registration data

The distribution of SBP students by geolocation has remained relatively stable. From 2015-17, on average 48% of SBP students were in metropolitan schools, 32% in provincial schools, 7% in remote schools, and 12% in very remote schools. The average distribution of SBP students by RDC region for 2015-17 is included in Table 5.2. This shows that the largest proportions of SBP students were in the South West (11%), Kimberley (10%), Goldfields-Esperance (7%), and Wheatbelt (7%) regions.

## 5.2.2 Aboriginal and Torres Strait Islander Students

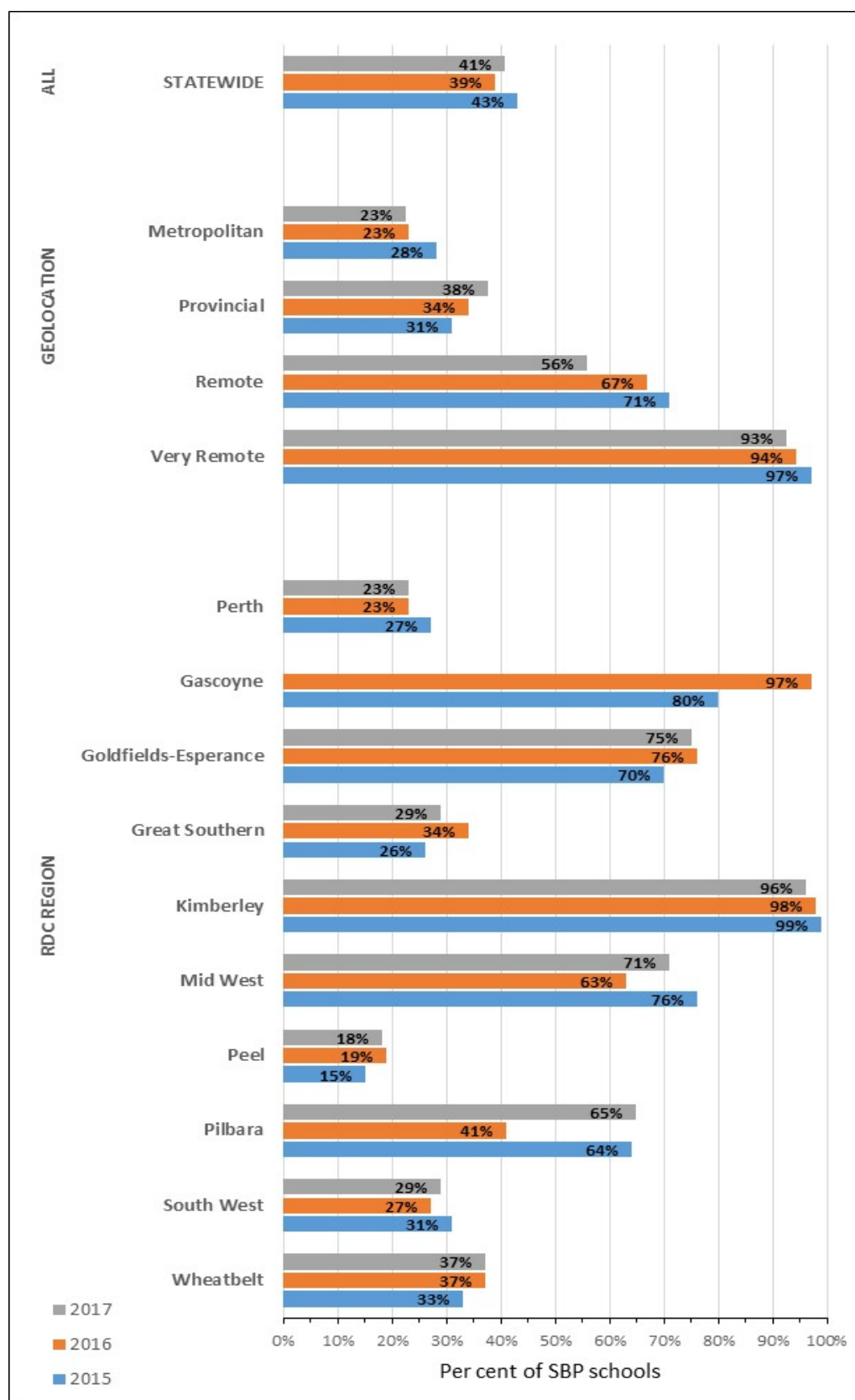
Aboriginal and Torres Strait Islander students are among the most vulnerable of students at educational risk. For this reason, data on the participation of Aboriginal and Torres Strait Islander students in the School Breakfast Program was requested via the annual SBP Coordinator Survey. Figure 5.1 shows the

*Many (40 out of 75) of our [students] are coming from homes that are not providing food regularly. [They] come from homes with substance abuse and family violence. Some of these [students] move from home to home (nan's, aunties, uncles, friends). (SBP Coordinator, South West, Provincial)*

proportion of Aboriginal and Torres Strait Islander students who access the School Breakfast Program according to geolocation and RDC region. As might be expected, schools in remote and very remote geolocations, and regions such as the Kimberley, Goldfields-Esperance, Gascoyne and Mid West, cater for much higher proportions of Aboriginal and Torres Strait Islander students (i.e. > 70%) than other WA schools.

<sup>16</sup> Note that the Pilbara region has lower participation than would be expected as a separate program for East Pilbara schools is funded by BHP Billiton.

**Figure 5.1: Percentage of students accessing SBPs who are of Aboriginal or Torres Strait Islander heritage, by geolocation and RDC region**



Source: SBP Coordinator Surveys 2015-17



## 5.3 Frequency of SBP Operations

The level of access that vulnerable students have to a nutritious breakfast is contingent on the number of days per week that breakfast programs are run and the availability of emergency meals on any non-breakfast program days. As shown in Table 5.3, there have been small increases in the frequency of breakfast and emergency meals from 2015 to 2017. In particular, the proportion of schools providing breakfast 5 days per week has risen from 64% to 75%, and the average days per week has increased from 3.9 days in 2015 to 4.2 days in 2017.

**Table 5.3: Number of days breakfast and emergency meals are offered in SBP schools**

	2015 <sup>1</sup>	2016 <sup>1</sup>	2017 <sup>1</sup>
<b>Breakfast Provided</b>			
1-3 days per week <sup>2</sup>	36%	36%	25%
4-5 days per week <sup>2</sup>	64%	64%	75%
<b>Days per week - mean</b>	<b>3.89</b>	<b>3.90</b>	<b>4.20</b>
<b>Emergency Meal(s) Provided</b>			
1-5 days per week <sup>2</sup>	83%	86%	88%
<b>Days per week - mean</b>	<b>3.98</b>	<b>4.08</b>	<b>4.17</b>

<sup>1</sup> Number of registered SBP schools: 2015 = 415, 2016 = 434, 2017 = 428.

<sup>2</sup> Percentage of registered SBP schools

Source: Foodbank WA annual SBP registration data

Figure 5.2 shows the trends in breakfast provision across the various geolocations and RDC regions. Small increases from 2015 to 2017 are evident for all groups, except for South West and Goldfields-Esperance. (Please note that since all means are greater than 3, the scale used in Figure 5.2 starts from 3 days, rather than zero.)

### 5.3.1 Emergency Meals

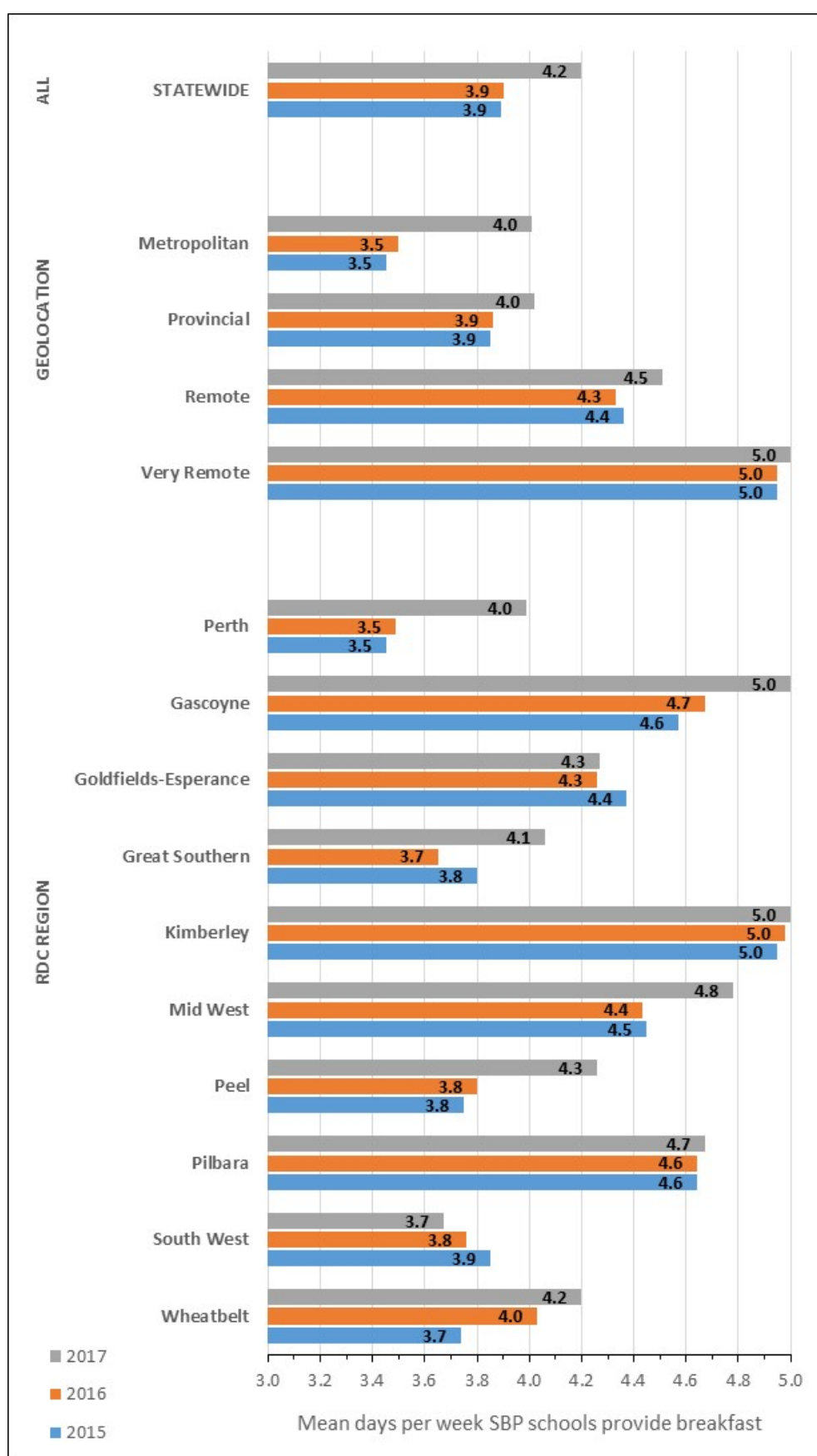
As indicated in Table 5.3 above, more than 80% of SBP schools provide emergency/additional meals (i.e. other than those offered through the formal breakfast program). Results of the SBP Coordinator Survey 2015-17 show that around 80% of schools provide lunches for students who arrive without food, two-thirds (64-71%) provide food for recess or morning tea when needed, and more than one-quarter (27-29%) provide food parcels for families in need. Less commonly, schools provide afternoon tea or after school snacks (1-12%), fruit for 'Crunch&Sip' or other school/classroom activities (2-5%), and food for miscellaneous purposes such as school camps. From the schools' written comments, it is clear they recognise the value of supporting students and their families beyond the provision of a formal breakfast program.

*We heard that one of our needy families had an influx of extra children to look after so we sent some extra items to help out as they were battling. (SBP Coordinator, Wheatbelt, Provincial)*

*We provide breakfast, a fruit snack, a hot meal and a sandwich meal every day for every student to ensure that they have a healthy diet (and are fed). (SBP Coordinator, Kimberley, Very Remote)*



**Figure 5.2: Mean (rounded) number of days per week breakfast is provided by SBP schools, by geolocation and RDC region**



Source: Foodbank WA SBP annual SBP registration data

### 5.3.2 Number of Breakfasts/Meals Provided

As part of the SBP registration process, schools are asked to estimate the number of students who will access the program on each day of the week that it is 'formally' run, excluding emergency meals. While these figures are only estimates, they do give an indication of the scale of breakfast provision across WA. According to the registration figures, more than 56,500 breakfasts/meals were served per week throughout 2015, rising to more than **59,000** per week in 2017. On average (rounded), 133 breakfasts/meals were provided per week by participating schools over the 2015-17 period. It is likely that these figures are an underestimation of the scale of breakfast provision given that more than 60% of schools that responded to the 2017 SBP Coordinator Survey reported they also allow staff and/or families to attend the breakfast program.

## 5.4 Regularity of Student Attendance at SBPs

It is difficult to determine at the program level how regularly students access SBPs since many schools do not seem to keep formal attendance records. This is not surprising given the voluntary nature of breakfast programs and the extra burden that detailed record keeping may place on SBP Coordinators, staff and/or SBP volunteers. However, some insight can be gleaned from the Student Survey where respondents were asked to indicate how regularly they attend the Breakfast Program based on a 4-point Likert scale ranging from 'always' to 'hardly ever'. Of the 87 student respondents, 28% said they 'always' attend the SBP on the days it is run, 36% said they attend 'most of the time', 29% attend 'sometimes' and only 7% 'hardly ever' attend.

*We don't keep a record of names of students who attend breakfast. (SBP Coordinator, Pilbara, Remote)*

## 5.5 Food Products Provided at SBPs

### 5.5.1 Foodbank Core and Perishable Products

The core products that Foodbank WA makes available to schools (see Table 1.1) are compliant with the WA Department of Education's Healthy Food and Drink Policy and fall within the 'green' and 'amber' categories. Results of the SBP Coordinator Survey (2015-17) indicate that all but one of the available products are accessed by more than 70% of schools. The least popular product is oats which is accessed by about half the schools. Oats – prepared as porridge - does tend to be a more seasonal product with many schools offering it only in colder seasons.

SBP schools are eligible to access free perishable/fresh products from Foodbank WA stocks (acquired through donations) to supplement their breakfast program. Products include bread, fruit/vegetables and yoghurt and are compliant with the Healthy Food and Drink Policy. Since schools must collect the products themselves, access is largely limited to those based within reasonable distance of a Foodbank WA branch. Schools too distant from a branch can choose to access Foodbank-supplied fresh products if prepared to pay the costs for refrigerated transport. Donated perishable products can be variable in quality or have a very limited shelf life, so quality can be an issue even if remote schools do choose to cover the costs of refrigerated transport. Based on data reported in the Foodbank WA Annual Program Reports for 2015 and 2016, an average of 115,191 kilograms of perishable foods were supplied to SBP schools each year.

*The products that we use through the Foodbank Program are a suitable quality with the need for travel and safe storage. We are unable to request perishables. (SBP Coordinator, Pilbara, Remote)*

Given the issues regarding access, it is to be expected that only around 60% of RDC (regional) schools access Foodbank WA perishable products compared to some 90% of Perth schools. Schools

*Food is always of good quality with long 'use by' dates. Would love to get perishables, but they are not available to us. (SBP Coordinator, Kimberley, Very Remote)*

in the South West, Gascoyne, Mid West, Great Southern and Wheatbelt regions had the highest rates of access (>70%), and Kimberley and Pilbara the lowest rates. Only one Kimberley school accessed Foodbank WA fresh produce and this was because the school covered the cost of refrigerated transport.

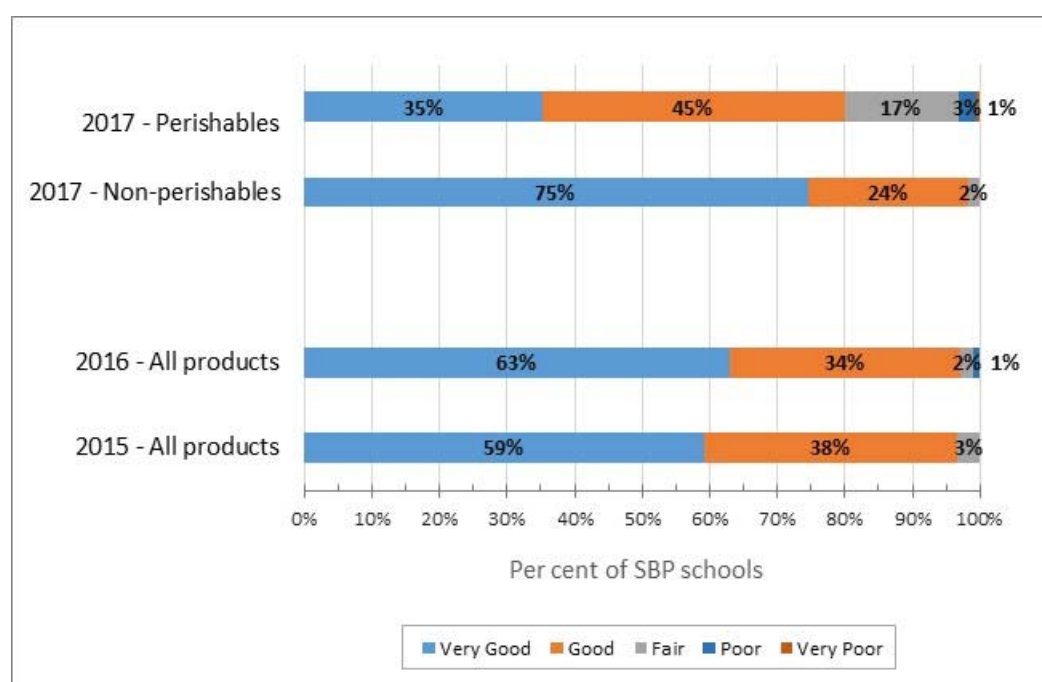
## Satisfaction with Foodbank WA Products

### Quality of Foodbank WA Products

The SBP Coordinator Surveys (2015-17) invited schools to rate the quality of Foodbank WA products. Ratings were high in 2015 and 2016, but it became clear from respondents' comments that there were differences in views regarding core and perishable products. Hence, for the 2017 SBP Coordinator Survey, separate ratings were requested. A comparison of the ratings for 2015-2017 is provided in Figure 5.3. It is clear that schools are less satisfied with the perishable/fresh products, nevertheless 80% of the respondents still rated the quality as 'very good' or 'good' and only 4% (i.e. 6 schools) gave ratings of 'poor' or 'very poor'. The latter schools were distributed among the Metropolitan area (2 schools) and Goldfields-Esperance, Kimberley, South West and Wheatbelt regions (1 school each).

*The products are fantastic for our students/community needs. Occasionally the fruit is a bit bruised so students won't eat it, but it can still be used in other ways. Everything else is great. (SBP Coordinator, Perth, Metropolitan)*

**Figure 5.3: Ratings of the quality of Foodbank WA's School Breakfast Program food products**



Source: SBP Coordinator Surveys 2015-2017

From the SBP Coordinators' comments about the quality of SBP products, it is clear that schools are highly appreciative of the support they receive. Although somewhat critical of the quality of the perishables – particularly the fruit – their comments reflect an awareness and acceptance of the limitations within which Foodbank WA is operating and the inherent difficulties in supplying fresh produce to schools. Countering the concerns about quality of

*We are in quite a remote area and appreciate the products that we received. Fresh items would cost far too much in freight. (SBP Coordinator, Mid West, Very Remote)*

fresh produce were many positive comments about the products, including expressions of gratitude about the School Breakfast Program and Foodbank WA itself.

### Range/Variety of Foodbank WA Products

Figure 5.4 provides a comparison of SBP schools' ratings of the range/variety of Foodbank WA products from 2015-2017. Each year more than 85% of schools rated product range/variety as 'very good' or 'good', but for 2017 there was an 11-percentage point decrease in the proportion of 'very good' ratings. Comments in which respondents indicated they would prefer a wider selection of products centred around the following issues:

- inability to access perishable products;
- restrictive food guidelines (i.e. traffic light system); and
- health/nutrition concerns.

A few schools located in very remote Aboriginal communities flagged their concern about the predominance of high carbohydrate foods in the core product range given the prevalence of diabetes among the local population.

*As the food provided is often seconds or close to its use by date we do not expect it to be of the highest quality, but it is always okay and we are very thankful for the provision. (SBP Coordinator, Perth, Metropolitan)*

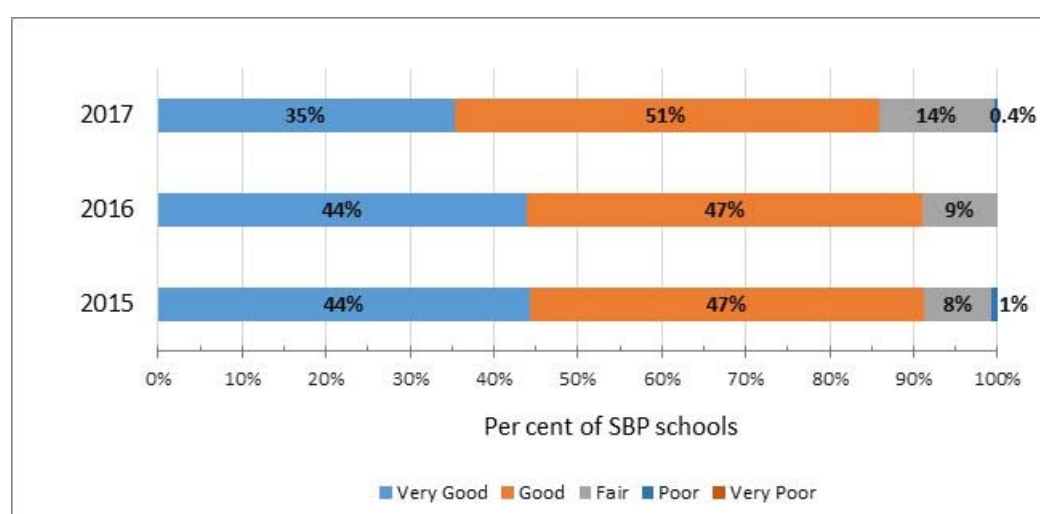
*The range and variety are just right. We are offering children a basic wholesome option for breakfast. There does not need to be further options. (SBP Coordinator, South West, Provincial)*

*It would be great if we had regular, reliable fruit products, plus vegetables like tomato, zucchini, onion - things that we can make hidden vegetable sauces out of, that we can put in toasties or on cheesies. Yoghurt, cheese and eggs would be great, too. (SBP Coordinator, Perth, Metropolitan)*

*Sometimes the variety is not there. I think that the guidelines are very strict which limits what we can offer to the students. (SBP Coordinator, Perth, Metropolitan)*

*... I am keen to buy in wholemeal bread and to look at alternatives to bread as this is not good for our students' diet. We use the tins of beans and spaghetti sparingly because of the amount of sugar in them. (SBP Coordinator, Kimberley, Very Remote)*

**Figure 5.4: Ratings of the range/variety of Foodbank WA's School Breakfast Program products**



Source: SBP Coordinator Surveys 2015-17

## 5.5.2 Additional Food Products

### Types of Additional Food Products Provided

A large majority of schools ( $\approx 80\%$ ) supplement the products provided by Foodbank WA for their breakfast program. This is true for schools across all geolocations and regions, though less so for very remote schools such as the Kimberley region where access to retail outlets is more limited. The additional products increase the variety and palatability of the meals provided, and schools use some foods such as pancakes or bacon and eggs as a treat or incentive to increase student attendance at the breakfast program and thus school attendance as well.

*We supplement the Foodbank WA products] to provide variety and to make the students feel special and valued (SBP Coordinator, Perth, Metropolitan)*

*We feed them every day so they have something decent to eat - rather than living on damper. Some of them are so hungry they ask for more before they are half way through the first thing they are eating and before all the other students have been given their food. I want to provide variety and nutrition. (SBP Coordinator, Goldfields-Esperance, Very Remote)*

To illustrate the types of products that schools source themselves, Figure 5.5 presents data from the 2016 SBP Coordinator Survey (the largest sample). Here the additional food items are arranged according to the categories of fruit/vegetables, protein foods, carbohydrate-rich foods, spreads and condiments, drink products and other foods. Products provided by more than 50% of the schools include: butter or margarine (87%), milo or other chocolate drink products (71%), and bread/toast (65%). Other commonly provided products were: sweet spreads (jam, honey, etc. – 48%), cheese (45%), eggs (40%), fresh fruit (40%) and flour/pancake mix (38%). We note that while the Foodbank WA-supplied products comply with the Department of Education's Healthy Food and Drink Policy and fall within the 'green' and 'amber' categories, some of the products sourced by schools themselves, such as sweet spreads and some chocolate drink products, fall within the 'red' category.

*Bacon and eggs is cooked on a Wednesday on the BBQ, as a treat and incentive to attend school. This is a good opportunity for the kids to see and eat the eggs laid by the school chickens, to help with cooking and clean up. Margarine is bought because toast without margarine is not good. (SBP Coordinator, South West, Provincial)*

*Margarine from IGA 3-5 hours away, eggs from same source, bread from same source, bush tucker bush tomatoes, sultanas, bush berries, watermelon and paddy melon from school community garden, herbs from school garden, fresh fruit trucked in from 3-5+ hours away. (SBP Coordinator, Kimberley, Very Remote)*

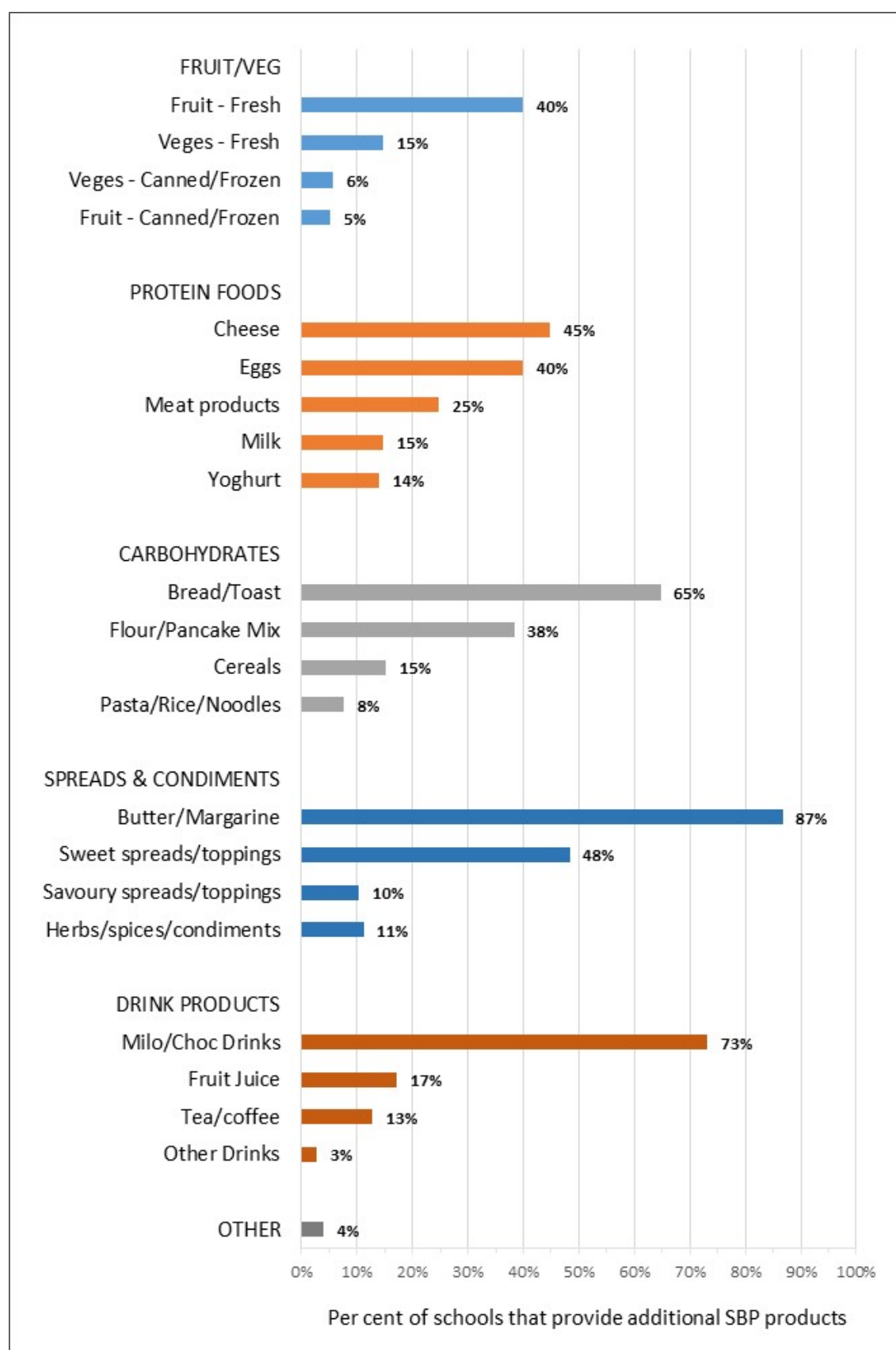
### Source of Additional Food Products

Schools source the additional food products in a variety of ways: school funds are the most common source ( $>60\%$ ), but schools also receive donations from their own staff, from parents/carers or the school community ( $>25\%$ ), local retail stores (25%), charities and community groups ( $>10\%$ ), and local growers/farmers ( $\approx 5\%$ ). A few schools ( $\approx 5\%$ ) supplement the breakfast program with fresh produce sourced from their school or community kitchen garden.

*The P&C provide a budget of \$1,000 for the purchasing of margarine, cheese and extra bread if needed. The school has a vegetable garden that is sourced seasonally to support the program. (SBP Coordinator, Mid West, Provincial)*

*Fruit donated by parents, margarine bought from nearby cafe (we do not have a general store), bread purchased or donated by parents or teachers. (SBP Coordinator, Wheatbelt, Remote)*

**Figure 5.5: Types of foods that schools use to supplement the Foodbank WA-supplied products for their breakfast programs**



Source: 2016 SBP Coordinator Survey.



### 5.5.3 Breakfast Program Menus

As noted in chapter 4, schools vary in terms of the breakfast menus they provide for students. Many provide relatively simple menus based on the Foodbank WA core products, such as cold cereal, toast and vegemite, or baked beans/spaghetti on toast. However, some schools provide more varied menus supplemented with eggs, vegetables, cheese or meat products. Pancakes or pikelets are also commonly provided on special occasions or a particular day of the week. As noted above, cooked meals are often used as an added incentive for students to attend school.

*On Friday we get scrambled eggs and baked beans on toast. (Year 5 Student, Metropolitan, School A)*

*Pancakes get the students in so we offer those on a Thursday morning only. (SBP Coordinator, Perth, Metropolitan)*

*Volunteer mums sometimes cook additional items such as pancakes. Occasionally provide a 'special' breakfast - sausage/fish/boiled eggs etc. (SBP Coordinator, Perth, Metropolitan)*

## 5.6 Summary / Key Points

- Schools that participate in the School Breakfast Program see it as an important means for them to assist students at educational risk.
- Factors that place students at educational risk, such as Aboriginal or Torres Strait Islander heritage, family dysfunction, family food insecurity and poverty are evident across all geolocation and regions. Some risk factors are more prevalent in particular geolocation or regions, such as cultural and linguistic diversity and homelessness in metropolitan schools.
- Disadvantage is not limited to schools with lower ICSEA ratings. Hence, it is important that schools from higher socioeconomic areas can continue to make a case for accessing the School Breakfast Program.
- More than 17,500 vulnerable children per year have been assisted by the School Breakfast Program from 2015-17.
- WA schools provided more than 59,000 breakfasts per week to students in need. Overall breakfast provision is likely to be greater since some schools also cater for parents and community members.
- The average number of days on which schools provide breakfasts and emergency meals have both increased in the 2015-17 period (currently both  $\approx 4.2$  days per week).
- Schools that serve highly disadvantaged communities typically provide more than just breakfast for students. Lunches and snacks are also provided, and many distribute food parcels and emergency supplies to families in need.
- Schools are very grateful for the Foodbank WA-supplied food products and generally satisfied with the quality and variety of products available through the School Breakfast Program.
- Schools would prefer to have greater access to quality fresh produce. Most (particularly remote schools) recognise this is problematic given the reliance on donations for fresh produce and high cost of refrigerated transport.
- Most schools source additional products for their breakfast programs in order to increase the variety and palatability of foods.
- Additional food products are sourced through school funds, donations, and school/community kitchen gardens.
- Cooked meals such as pancakes or bacon and eggs are deliberately used by schools as an extra incentive to boost student attendance.



## 6. Impact on Capacity for Learning

EQ2 Has children's capacity for learning increased?

### 6.1 Introduction

There are many factors that can influence children's capacity for learning – some of which are not within a school's sphere of influence. However, evidence from the research literature presented in Chapter 2 suggests that school breakfast programs can bring significant social benefits and have a positive influence on factors such as school attendance and punctuality, and students' readiness for learning, concentration, and behaviour in class. This chapter therefore presents evidence gathered from schools, students and stakeholders about the influence of the School Breakfast Program on various aspects of students' schooling and development. It draws on data from the SBP Coordinator Surveys (2015-17), Stakeholder Survey, Student Survey and case study data (including student behaviour and attendance data). We begin by presenting the quantitative measures relating to impact, then explore what this means in practice through the qualitative data.

### 6.2 SBP Coordinators' Ratings of Impact

The annual SBP Coordinator Survey (2015-2017) invited respondents to indicate the approximate proportion of SBP students that were positively impacted by the program via a five-point Likert-type (ordinal) scale ranging from 'all' (students) to 'none'. A separate 'don't know' category (not part of the ordinal scale) was provided – acknowledging that it may be difficult to isolate or attribute the influence of a single program on student outcomes.

All (≈100%)	Most (≈75%)	Some (≈50%)	Few (≈25%)	None (≈0%)
-------------	-------------	-------------	------------	------------

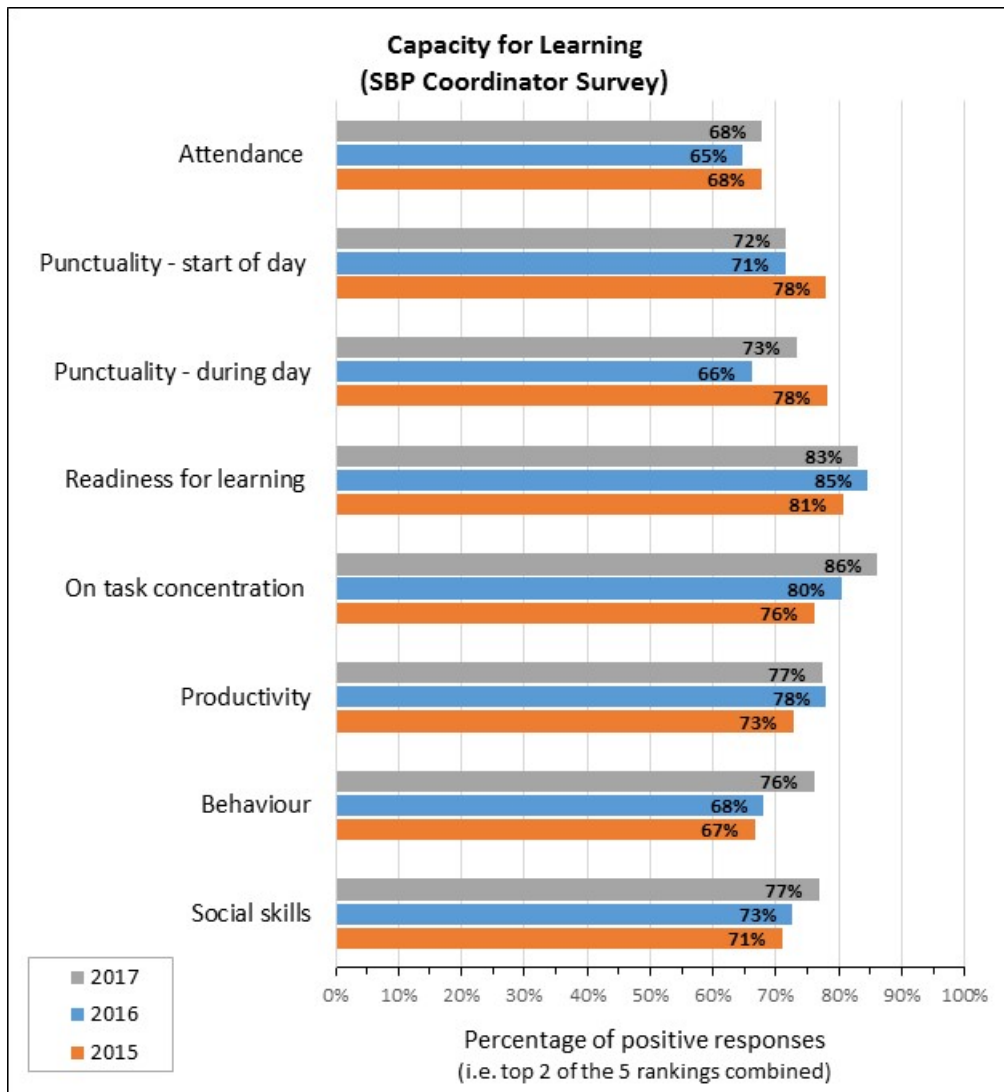
Nine items were used to elicit information about impact on students' capacity for learning, including: attendance, punctuality (2 items), readiness for learning, concentration, productivity, behaviour, and social skills. Across the three surveys, ratings for individual items were provided by a minimum of 73% and a maximum of 89% of the SBP Coordinators from participating schools. Some SBP Coordinators commented that they were not in teaching roles or had no contact with teaching staff, so could not ascertain impact. Others stated that their school's breakfast program was very new so it was too early to tell.

*I can only comment on the participating students that came to my classroom for learning, not the rest of the classes. My students who came to school without breakfast were unfocused, disruptive. Those who came and ate during breakfast club were definitely more settled and ready to start work. (SBP Coordinator, Wheatbelt, Provincial)*

Figure 6.1 provides a snapshot of the results from all three SBP Coordinator Surveys in which the top two categories of 'all' and 'most' have been combined. The following trends are evident:

- Readiness for learning had the most consistently high ratings, above 80%, over the 3-year period.
- Other highly rated indicators of capacity for learning, with more than 70% positive responses, were punctuality (start of day), concentration, productivity in class, and social skills.
- Although the ratings for behaviour, calmness and punctuality during the day were more variable, at least 62% of participating schools still rated them highly.

**Figure 6.1: Comparison of ratings by SBP Coordinators of the positive impact on capacity for learning for 'all' or 'most' students, 2015-2017**



Source: SBP Coordinator Survey 2015, 2016 & 2017

For each year cohort (2015, 2016, 2017), overall mean scores were generated for all eight items within the capacity for learning 'theme'. Statistical comparisons using both parametric (one-way analysis of variance) and non-parametric tests (Kruskal-Wallis) were made on the basis of geolocation and RDC region, but no significant differences were found.






## 6.3 Comparison of Ratings by SBP Coordinators, Stakeholders and Students

Participants in the Stakeholder Survey and Student Survey were also asked to rate the impact of the School Breakfast Program on students' capacity for learning. The same indicators were used for both surveys, however the five-point Likert scale for stakeholders was worded as follows:

Very strong impact	Strong impact	Moderate impact	Little impact	No impact
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For the Student Survey, the wording of the Likert-scale and individual survey items was modified to ask about the impact of the SBP on students' *own* capacity for learning, not SBP students in general. The modifications were as follows, with the abbreviated concept shown in brackets:

How much does attending Breakfast Club help you with these things:

Very much 	Quite a lot 	Somewhat 	Very little 	Not at all 
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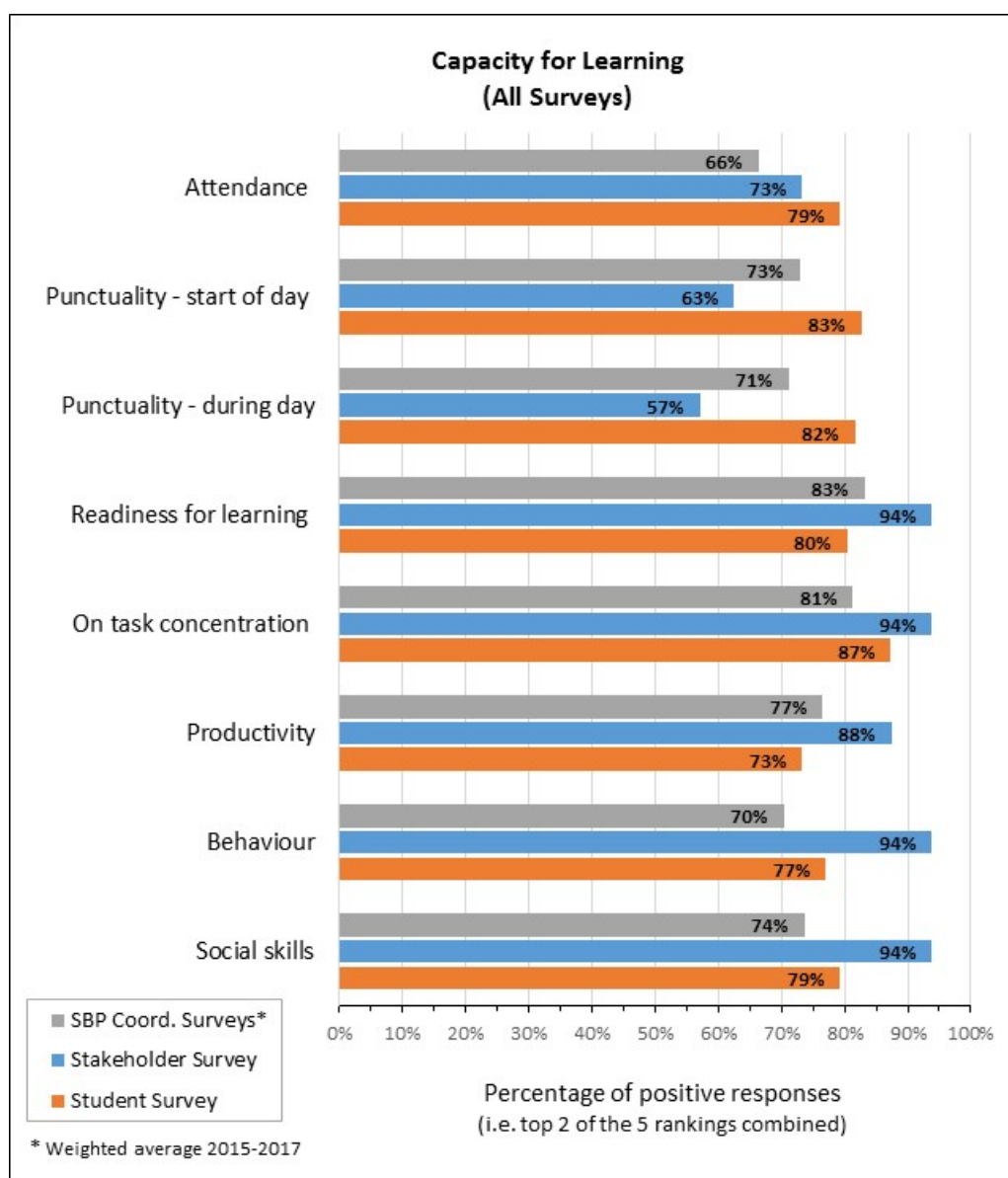
- Wanting to come to school (i.e. attendance)
- Being on time to school in the morning (i.e. punctuality – start of day)
- Being on time to classes during the rest of the day (i.e. punctuality – rest of day)
- Feeling ready to learn in the morning (i.e. readiness for learning)
- Being able to concentrate in class (i.e. on task concentration)
- Being able to get my work done during class (i.e. productivity)
- Behaving well in class (i.e. behaviour)
- Feeling calm (i.e. calmness)
- Being good at making friends and getting on with people (i.e. social skills)

Figure 6.2 displays the results from all three surveys to enable direct comparison. Only the top two positive responses of the five-point scales are presented. Note that the SBP Coordinator Survey data are the weighted average percentages for the three-year period (2015-17). It is important to keep in mind that the sample sizes for the Stakeholder Survey (n=20) and Student Survey (n=87) are small, so the results are more sensitive to extreme scores and more likely to be biased. Further, the Stakeholder Survey represents case study schools only. Of the 20 respondents, only one was an SBP volunteer, the remainder were teachers, education assistants, principals, deputy principals, or school managers/administrators.

Whilst keeping in mind the limitations of this data, it is interesting that the stakeholders and students tended to give higher ratings than the SBP Coordinators on most of the indicators. The following patterns are evident:

- Readiness for learning and concentration were rated highly ( $\geq 80\%$ ) by all three respondent groups.
- Students were more optimistic than SBP Coordinators and Stakeholders regarding impact of the SBP on their attendance, punctuality (start of day and during day) and calmness.
- Stakeholders placed more emphasis on the impact on students' behaviour and social skills than the other groups.

**Figure 6.2: Comparison of the positive ratings of impact on children's capacity for learning from the SBP Coordinator Survey, Stakeholder Survey and Student Survey**



Sources: SBP Coordinator Survey (2015-17), Stakeholder Survey and Student Survey

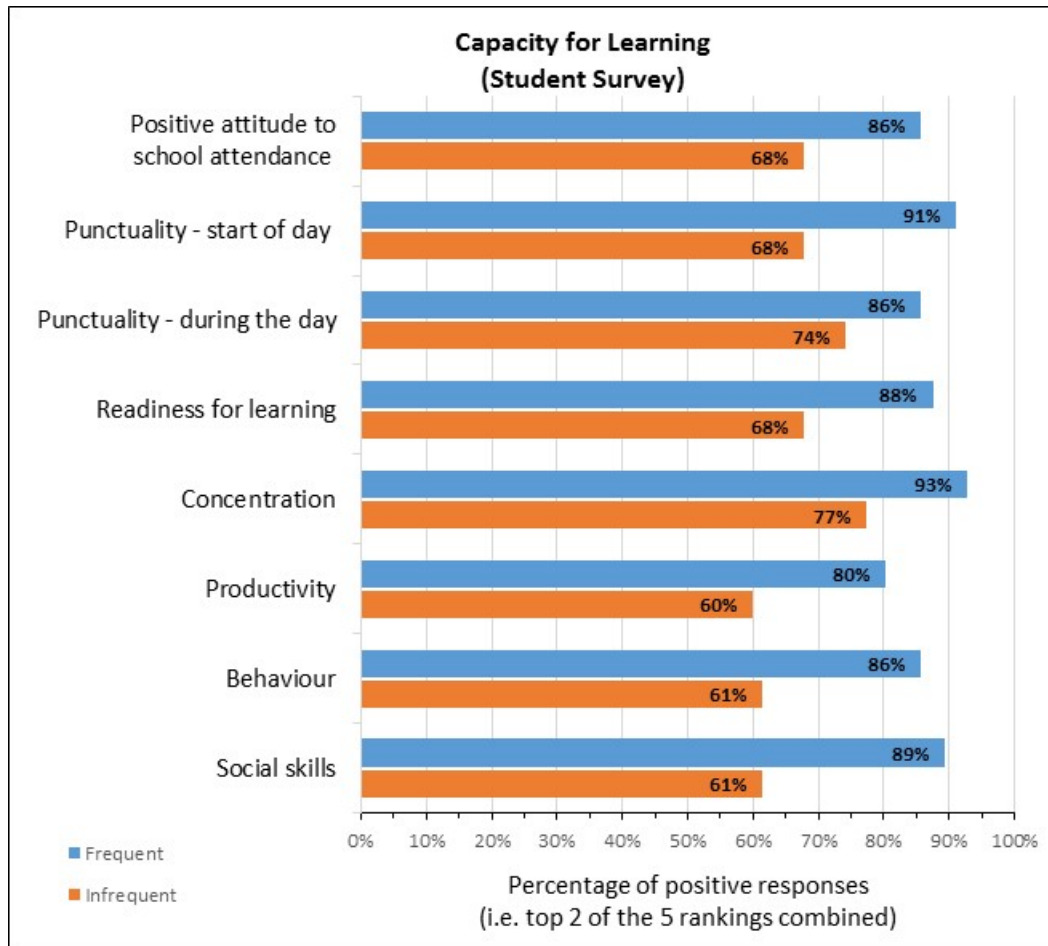
## 6.4 Student Survey Group Comparisons

Given the larger sample size for the Student Survey (n=87), it was feasible to compare the effect of factors such as year group (Years 3-5 versus Years 6-10)<sup>17</sup>, gender, and frequency of attendance at the SBP on students' ratings. Comparisons were conducted using the non-parametric Mann-Whitney U test. A significant difference was found for frequency of attendance only. That is, students who reported attending 'always' or 'most of the time' (median = 4.6) gave a greater proportion of positive responses than those who attended

<sup>17</sup> This grouping was necessary to achieve relatively balanced groups.

less frequently (median=3.9)<sup>18</sup>. This trend is clearly evident in Figure 6.3 which compares the top two positive response categories for both groups.

**Figure 6.3: Comparison of ratings of the impact of the SBP on capacity for learning given by students who attend the SBP frequently versus infrequently**



Source: Student Survey

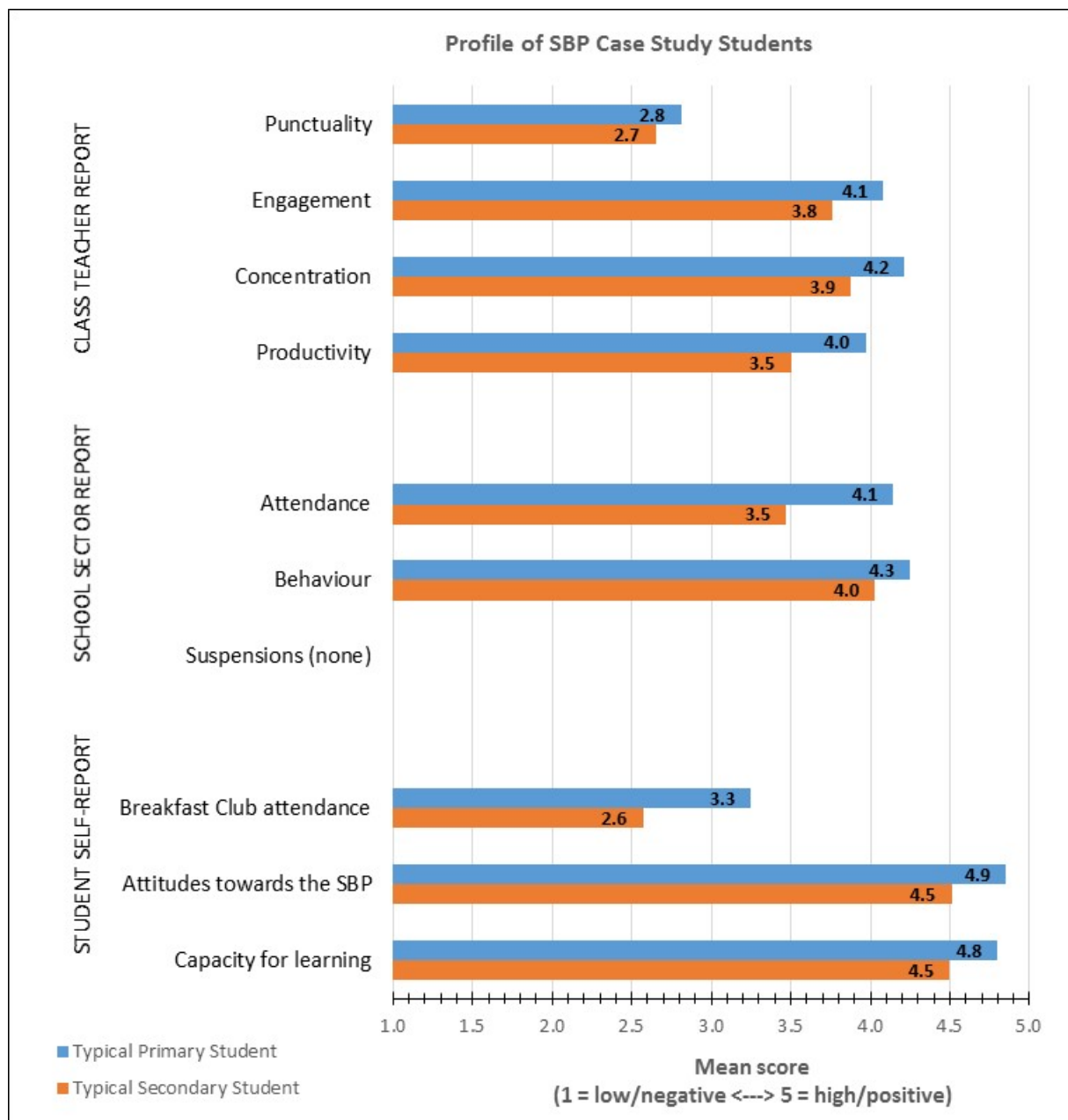
## 6.5 Case Study Students

As described in Chapter 3, the case studies drew on a range of data including student attendance and report data, teacher journal entries, and the Student Survey. Data from these sources are brought together in Figure 6.4 in order to present a profile of the primary and secondary SBP case study students. All measures, including attendance percentages and report ratings, have all been converted to a common scale ranging from 1 to 5, where 1 represents a low or negative rating and 5 represents a high or positive rating. The low response rates for the case studies (reported in Chapter 3) have meant that full data sets were only obtained for 12 students, so the results presented in Figure 6.4 cannot be generalised. It is interesting to note, however, that the ratings for the secondary students were consistently lower than the primary students. The secondary students' lower average attendance at the School Breakfast Program is of particular interest in light of the above finding of a positive association between frequency of SBP attendance and impact on capacity for learning.

<sup>18</sup> Mann-Whitney U test: Z-value=3.541, p<0.001

The experience of case study School C is of relevance here. The school caters for students from K-10 and it was noted that the attendance of individual children tends to drop when they enter the high school. The SBP Coordinator explained that from the students' perspective, "It's not cool anymore. It's not cool to hang out with little kids, you know, even though they were one week into Year 7". Since the school breakfast is currently served in a primary school area, it was acknowledged "if we were in a high school area then the high school kids would eat more". However, moving the SBP to an appropriate high school area was not seen as a viable alternative: "If we used the home ec room [for example], I don't think the little kids would feel comfortable. It's in the high school area, big chairs, you know..."

**Figure 6.4: Profile of primary and secondary students from the case study schools (mean scores where 1=low/negative and 5=high/positive)**



The impact of adolescence and onset of puberty must be considered when interpreting the differences observed in Figure 6.3. It is well accepted that the physiological, social, cognitive and emotional changes associated with the onset of puberty can affect educational outcomes for children and teenagers. A recent Australian study showed that as children advance through puberty, their self-efficacy and the value they place on school diminish, which in turn has a negative effect on academic achievement [4]. This has important implications for the role of school breakfast programs that cater for secondary school students – and particularly those that accommodate a wide age group (e.g. K-10 or K-12). Different approaches are likely to be necessary to boost the incentive for older students to access breakfast programs and reap the flow-on benefits of increased SBP attendance. Consideration could be given to alternative service methods such as ‘grab and go’ to give more flexibility for teenagers who typically arrive later at school and may miss out on a traditional ‘sit down’ breakfast.

## 6.6 Qualitative Evidence of Impact on Capacity for Learning

The SBP Coordinator Surveys and case study interviews have generated a comprehensive bank of qualitative evidence about what the impact of SBPs on students’ capacity for learning looks like from different perspectives and in different school contexts. Although some SBP Coordinators were careful to point out they did not have access to conclusive empirical data, there was overwhelming agreement that by helping to meet students’ nutritional needs within a supportive environment, the SBP has had many observable positive flow on effects. The perceptions of various stakeholder groups regarding some of the key factors or indicators of capacity for learning are explored in the following sections.

*The provision of this meal (first for some, second for bus kids who may have left home before 7:00 am) is the single most successful intervention for broad spectrum improvements. I am earnestly attempting to see the program expand to at least three days per week and preferably more. (SBP Coordinator, Great Southern, Provincial)*

### 6.6.1 Attendance and Punctuality

School attendance is a crucial determinant of academic achievement given its direct association with learning time. As discussed in Chapter 2, evidence from the research literature suggests SBPs can play an important role in improving attendance rates and reducing absenteeism. For the SBNEP evaluation, school attendance was not the most highly rated of the capacity for learning indicators, however there was general agreement among SBP Coordinators, stakeholders and students alike that the availability of a free school breakfast (particularly a cooked breakfast) did provide an incentive for some students to attend school. This was more strongly evident in highly disadvantaged and/or remote community schools where food insecurity and fluctuations in attendance rates were more pronounced. Some respondents noted that overall school attendance measures did not necessarily show clear improvement, but that the SBP made a big difference for the attendance of particular individuals.

*Teachers who help at the club have the highest levels of attendance at classroom level as the relationship between student and teacher outside the classroom is positive. (SBP Coordinator, Perth, Metropolitan)*

*It increases earlier attendance rates. For some it is the knowledge that food exists that entices them to come, but not always participate. Regularity of meals is also important so that students can predict when is the best time to arrive. Once they are within the premises, a range of engagement attempts are employed to keep them participating, even for a short time, until they feel comfortable to stay for longer periods. Knowing that lunch is also available means they may stay longer. For many it is the last meal for the day until we see them again. (SBP Coordinator, Perth, Metropolitan)*



Punctuality was often mentioned together with attendance since students need to arrive at school early enough to access the free breakfast. As will also be seen in later sections, the social aspects of the breakfast program are also seen to encourage attendance and motivate students to be on time. Exemplar comments from research participants in relation to attendance and punctuality are presented in Table 6.1.

*For the Aboriginal children who access the Breakfast Club, they are at school on time and, having had a reasonably healthy breakfast, are better able to concentrate in the classroom. (SBP Coordinator, Wheatbelt, Provincial)*

*Before this programme was running there were many late students to school and then they said they were hungry so were even later getting to class. Now they come on time to eat first at breakfast club. Students seem more settled too. (SBP Coordinator, Goldfields-Esperance, Provincial)*

**Table 6.1: Impact of the School Breakfast Program on students' attendance and punctuality**

Respondents	Attendance and Punctuality
SBP Coordinators	<i>Students who have had a prior track record of being late to school or poor attendance have an improved attendance and punctuality once engaged in attending Breakfast Club. (SBP Coordinator, South West, Provincial)</i>
Teacher	<i>It's also a reason why our students do come to school too, because they know that they are going to get that consistency, you know, the meals, each day. ... you get to know who's hungry, because they're lining up at the gate ready to come to school. (Lead Teacher, School E, Kimberley, Very Remote)</i>
Parent	<i>They probably look forward to going to breakfast, and want to go to school, and then, "You'll be able to have a nice breakfast." (Parent, School A, Metropolitan)</i>
Student	<i>[By coming to Breakfast Club] I've learnt to be on time at school. (Year 5 Student, School A, Metropolitan)</i>

## 6.6.2 Readiness for Learning

Providing a nutritious meal for students was universally acknowledged by the research participants as crucial in alleviating hunger and boosting energy levels so that students can start the day on a positive note and engage with their learning. While the obvious physical and cognitive benefits of feeding hungry students were emphasised, respondents also pointed out that the supportive social environment of the school breakfast program had a positive effect on students' mood and disposition, which in turn increased their readiness for learning. Exemplar comments about readiness for learning by different stakeholder groups are presented in Table 6.2.

## 6.6.3 Concentration and Behaviour

As seen earlier (Figures 6.1 and 6.2), the impact of the School Breakfast Program on children's ability to concentrate received the highest survey ratings. This was further reinforced through the survey respondents' written comments and was a strong theme among the interviewees in the case study schools. Several of the younger case study students were able to articulate how skipping breakfast had an adverse effect on their ability to concentrate and hence their ability to regulate their mood and behave appropriately in class. In the context of capacity for learning, behaviour and social skills are inextricably linked in that students need to be able to engage positively and appropriately with their teachers and classmates so that learning can take place. The negative impact of poor concentration on students' social interactions and classroom behaviour was frequently mentioned by the participants, hence the exemplar quotes from participants presented in Table 6.3 are indicative of impact on concentration and behaviour/social skills.

**Table 6.2: Impact of the School Breakfast Program on students' readiness for learning**

Respondents	Readiness for Learning
Parent	<i>Well, it just basically helps them to prepare for the day. That way, like, kids have got the breakfast club, so they're not going to be hungry as they go into class, and that way they've got a full belly, and they're going to concentrate. They're going to do... you know, [it] just sets them up for the rest of the day. (Parent, School A, Perth, Metropolitan)</i>
Students	<p><i>When I've had a feed I feel more like going to school. It helps, because ... I can't think with an empty stomach. (Year 7 Student, School D, Gascoyne, Remote)</i></p> <p><i>Yeah, because if I didn't have breakfast, then I'll start getting tired around the ten o'clock mark, so that's during our learning time. And if I don't have breakfast, then I try really hard to stay up. But if you go to breakfast club and you eat, just even one piece of toast, then you can get more energy in you, and then you can stay up for longer. (Year 6 Student, School A, Perth, Metropolitan)</i></p> <p><i>[Not having breakfast] It make my engine run low. I just sit, and just feel tired, and I keep worrying about breakfast. [When we've had breakfast] then we run good. We run around, play here, and then when you go back to the class we get back just right. We're working well. Listening to instruction and focusing on work. (Year 6 Student, School E, Kimberley, Very Remote)</i></p>
SBP Coordinators	<p><i>The breakfast program ran at our school 2 days per week for years, just over a year ago it moved to 5 days per week because we noticed the positive impact it had on students' preparation for the school day. It is a very positive way to start the day and the teachers note improvement in the children's capacity to engage in the classroom when they have attended breakfast club. (SBP Coordinator, Perth, Metropolitan)</i></p> <p><i>It gives students a good start to the day which sometimes they don't have. It also provides a social aspect to integrate with their peers so they are ready to start learning for the day. (SBP Coordinator, Perth, Metropolitan)</i></p>
Teacher	<i>In terms of their learning, they're more focused, they're more alert... their basic needs are met. Whereas if they weren't, they're sitting there with a hungry tummy and getting grumpy, and not learning. (Teacher, School A, Perth, Metropolitan)</i>

**Table 6.3: Impact of the School Breakfast Program on students' concentration and behaviour**

Respondents	Concentration and Behaviour
Parent	<i>With my middle son that's here [at this school], he gets out of hand. I've had quite a bit of problems with him, and it normally works out it's the days he's not having breakfast. (School A, Perth, Metropolitan)</i>
Students	<p><i>[When we don't eat breakfast] we be naughty. And we get more hungry. You talk while the teacher's talking. And you muck around with your shoes, or your hair. Yeah. You play with other people's hair. Oh yeah, and you don't do your work and stuff. And you get distracted by boys too, and girls. (Year 4, School A, Perth, Metropolitan)</i></p> <p><i>[When you don't have breakfast] You get on the traffic lights. You can get in trouble... Because you're not focussed on what you're doing. ...And your brain doesn't concentrate on what you have to do. (Year 6, School A, Perth, Metropolitan)</i></p> <p><i>I get really angry and stuff [when I'm hungry]. I get anger problems. (Year 6, School A, Perth, Metropolitan)</i></p>
SBP Coordinators	<p><i>It definitely makes a difference in behaviour and concentration with our students if they haven't had a meal. (SBP Coordinator, Goldfields-Esperance, Remote)</i></p> <p><i>I believe after running a breakfast club for six years that it has a positive impact on the students' ability to concentrate and focus in class. Teachers often report that students who attend seemed more settled and able to focus. (SBP Coordinator, Perth, Metropolitan)</i></p>

Table 6.3 (Cont.)

Respondents	Concentration and Behaviour
Principal	<i>[If they don't have breakfast] they're worried. And that's the expression the kids use now, 'worried about food', they're just thinking about food all the time, they're not working on their stuff, they can't concentrate. So that learning time's lost, and we struggle to get the best learning time anyway. (School E, Kimberley, Very Remote)</i>
Teacher	<p><i>[Without breakfast] they find it extremely difficult, if not impossible to be able to concentrate, to be able to be comfortable, to actually pay attention, to be actually engaged, listen, not be as disruptive. The flow-on effects from them not being nutritionally supported is that they have a tendency to want to curl up and just sleep, or switch off, or - the other extreme, which I haven't seen on many occasions - is anti-social behaviour, but they are obviously stressed, or irritated if they haven't been fed. (Teacher, School E, Kimberley, Very Remote)</i></p> <p><i>I remember one day I didn't know the [Breakfast Club] was closed. I'd come in, I'd been in a meeting or something, and within seconds I worked it out because the whole class was completely different, and nearly all of them were having breakfast at Breakfast Club and missing out just threw them. A lot of them wanted to go back to camp, or they just regressed, they became really, sort of more childlike, didn't want to go to school at all, and there was lots more scuffling and touching and things, so it was interesting. (Teacher, School E, Kimberley, Very Remote)</i></p>

## 6.7 Qualitative Evidence of Broader Impact on Learning and Teaching

SBP Coordinators were also asked to comment more broadly on the impact of the SBP at the classroom level. While their comments overlap considerably with earlier descriptions of impact on capacity for learning, some afford greater insight to the 'bigger picture' of how breakfast programs are contributing to learning and teaching and helping to deliver positive outcomes for schools.

Key features of the Coordinators' comments relating to impact on learning and teaching included smoothing of the transition from home to the classroom, improvement in students' mood, demeanour and attitude to learning, greater sense of calmness and order in classrooms, and fewer incidences of inappropriate behaviour requiring removal of students from the classroom. Several schools noted that the breakfast program had alleviated some of the pressure on teachers who had previously been providing food for students themselves, or having to take time out from their teaching program to deal with the negative flow-on effects of hungry students arriving to class in a distressed state or negative frame of mind. Several representative comments relating to these themes are provided in Table 6.4.

*Before the breakfast program, teachers were providing students who turned up hungry with toast or a snack and this was taking up their class preparation time and was difficult to manage. Students would arrive at any given time, and were often difficult to engage with if they hadn't eaten breakfast. The program, now led by one of our admin staff, has encouraged students to arrive on time and be ready for learning. Teachers feel more in control of their mornings and are starting the day stronger. (SBP Coordinator, Kimberley, Very Remote)*

**Table 6.4: SBP Coordinators' perspectives of the impact of the School Breakfast Program on learning and teaching**

Theme	Exemplar comments
<b>Better transition to learning</b>	<p><i>Calmer and more productive students. Helps with the transition from home to classroom behaviour, making for quicker move towards engaging in school work. (SBP Coordinator, Great Southern, Remote)</i></p> <p><i>Students and teachers access the breakfast club which also provides them with a positive shared experience before the day begins. Great process for transition between a stressful/chaotic morning at home to a more positive mind set for learning at school. (SBP Coordinator, Peel, Provincial)</i></p>
<b>More engagement in learning</b>	<p><i>Starting the day with something to eat followed by fitness activities has enabled students to settle into the daily routine of school and engage with their learning. Students who come late and do not have this routine find being at school and following the routines of the classroom more difficult and this often leads to inappropriate behaviours and their ultimate consequences. Since the introduction of Breakfast Club the numbers of students in this latter group has shown a marked decline. (SBP Coordinator, Peel, Provincial)</i></p> <p><i>On the days Breakfast club is not on, the students are hungry and feel unwell or slow before recess and lunch. Lot of students miss the social connection that morning. Students have a better day at school when Breakfast Club is on. (SBP Coordinator, Wheatbelt, Provincial)</i></p>
<b>Better behaviour / fewer class disruptions</b>	<p><i>I have had teachers tell me about kids engaging more, being on time, and having a better attitude. I work in student services and have seen a decrease in referrals for behaviour management. My role includes working with students and behaviour modification, which requires them to check in with me 4 times per day. At first break on [breakfast club days], I have seen an improvement on their behaviour report cards, indicating an improvement in class behaviour. (SBP Coordinator, Perth, Metropolitan)</i></p> <p><i>The school breakfast program complements our mentoring program which has led to increased classroom engagement, ability to stay on task during class, and staff are less likely to remove a student from class to 'talk' about what is distracting them from classwork. Student retention and ability to socialise with mainstream is improving. (SBP Coordinator, South West, Provincial)</i></p>

## 6.8 Summary / Key Points

- Impact of the SBP on children's capacity for learning was determined via a series of indicators that included: readiness for learning, on task concentration, attendance, punctuality, productivity in class, behaviour and social skills.
- There was strong, consistent agreement among all stakeholder groups, including students themselves, that the SBP had a positive influence on all of the capacity for learning indicators.
- SBP Coordinators and other stakeholders (mainly teachers) particularly focused on improvement in children's readiness for learning and ability to concentrate or focus on learning.
- The SBP was seen as an incentive for some students to come to school, particularly in schools with high levels of disadvantage and food insecurity. This was not necessarily strongly reflected in overall school attendance rates, but rather in improved attendance of individual students.
- Students tended to be more optimistic about the impact of the SBP on their attendance, punctuality and calmness than the SBP Coordinators and other stakeholders.
- Students who were frequent attenders at the School Breakfast Program attributed greater impact of the SBP on their capacity for learning than infrequent attenders.

- Among the case study school students, secondary students attended the SBP less frequently than primary students and had lower teacher ratings, school report, and self-report ratings for the various indicators of capacity for learning.
- Given the link between SBP attendance and the level of impact on capacity for learning, it may be important for schools to consider ways of boosting the SBP attendance of teenagers and older students.
- While alleviating hunger and boosting energy was acknowledged as an essential prerequisite for learning, the supportive social environment of breakfast programs was also seen as highly influential in lifting students' mood and improving their receptivity to learning.
- At the classroom level, the SBP is seen to have a positive impact on teaching and learning by smoothing the transition from home to school, bringing a greater sense of calm and order, and reducing the incidences of inappropriate behaviour that disrupt learning.

## 7. Impact on Personal/Social Competency and Social Relations

EQ6 Has there been increased human capacity and community cohesiveness in targeted schools and communities?

### 7.1 Introduction

Food and eating are associated with celebration, sharing and social cohesion, and as such are an important part of the social fabric – including within schools and education institutions. The School Breakfast Program can therefore be an important vehicle for bringing together broader groupings of students and adults within a social rather than educational setting. Many schools actively capitalise on this as a means of fostering positive relationships between students, teachers/staff, volunteers and perhaps also parents/carers and families. Such occasions can provide rich experiences in which children practice and develop social skills and build their overall social capability and sense of self. Meeting children's nutritional needs also contributes to personal capability in terms of general physical health and level of physical activity.

*Food breaks down barriers between long established 'enemies' that may have existed in previous school settings. In a supportive, non-judgmental environment, where discrimination, bullying and fighting is not tolerated, gathering to share food or teaming up to help with the preparation of food, can be the conduit to establishing new and positive relationships. The sharing and eating of food aids in socialisation of students who may have been isolated for some time. To celebrate special events, or honour special milestones, each site may choose to host a full scale lunch, with set tables, cutlery, serviettes and decorations. Young people are included in the planning and preparation. Sadly, for some it is their first experience of celebrating a sit down meal with others and being involved in the etiquette involved in such an event. Events like these bond the students from some very diverse backgrounds. (SBP Coordinator, Special Program, Metropolitan)*

This chapter presents evidence in relation to the impact of the School Breakfast Program on students' personal/social capability and school-based social relations. It draws on data from the SBP Coordinator Surveys (2015-17), Stakeholder Survey, Student Survey and case study interviews. Quantitative measures relating to impact are presented first, followed by participants' perspectives and interpretations.

### 7.2 Personal and Social Capability

#### 7.2.1 SBP Coordinators' Ratings of Impact

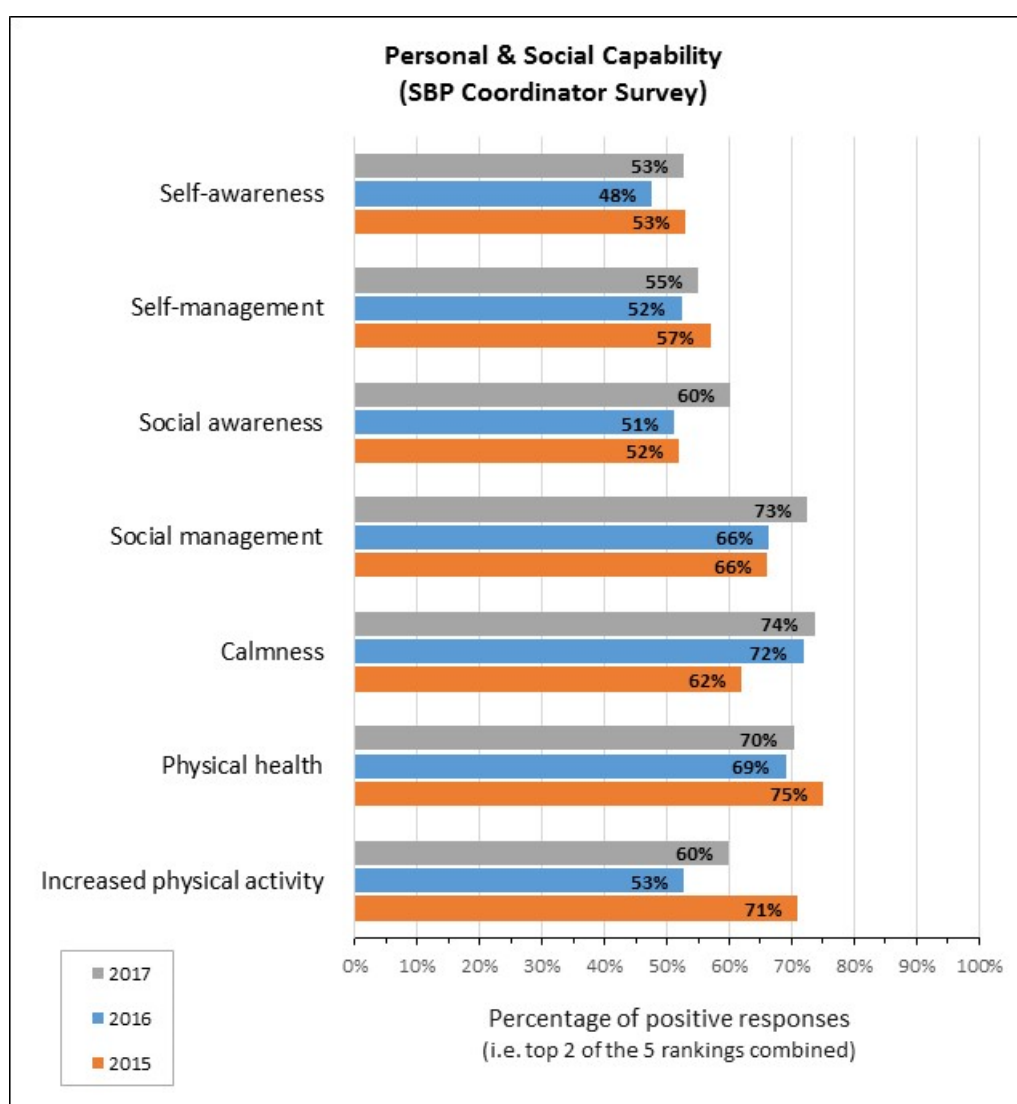
The SBP Coordinator Survey included eight items aimed at gauging the impact of the SBP on children's personal and social capability, as follows:

- Self-awareness - recognising own emotional states, needs and perspectives
- Self-management - using particular strategies to manage self in a range of situations
- Social awareness - recognising others' feelings and knowing how and when to assist others
- Social management - interacting effectively and respectfully with a range of adults and peers
- Calmness
- Physical health
- Increased physical activity

The same five-point Likert scale as described in section 6.2 was used. The response rates for individual items varied somewhat, with 'Increased physical activity' achieving the lowest responses rates (69%-72%), and 'social management' the highest (83%-85%) across the three annual surveys.

Figure 7.1 shows the percentages of positive responses (i.e. top two categories combined) for each item and each survey year. While the ratings are not as strong as those seen for capacity for learning (Figure 6.1), they are still generally positive with at least 50% of respondents indicating the SBP had a positive impact on 'all' or 'most' students for all but one item (i.e. self-awareness in the 2016 survey).

**Figure 7.1: Comparison of ratings by SBP Coordinators of the positive impact on personal and social capability for 'all' or 'most' students, 2015-2017**



Source: SBP Coordinator Survey 2015, 2016 & 2017

In order to check for possible regional differences, mean scores were created for the overall theme of personal and social capability within each cohort (2015, 2016, 2017). Statistical comparisons were then conducted using one-way ANOVA and its non-parametric equivalent, the Kruskal-Wallis test. No significant differences were found on the basis of geolocation or RDC region for 2015, 2016 or 2017.



## 7.2.2 Comparison of Impact Ratings by SBP Coordinators, Stakeholders and Students

As described earlier, similar items were used for the SBP Coordinator, Stakeholder Survey and Student Survey in order to triangulate findings, but with some modification to the wording of the five-point Likert scales. For the Student Survey, the wording of the personal and social capability items was also altered to aid comprehension. The alternative wording of each item is shown below.

Breakfast Club helps me with:

- being aware of my feelings and emotions (i.e. self-awareness)
- managing my emotions and the way I react to different situations (i.e. self-management)
- understanding other people's feelings and how and when to help them (i.e. social awareness)
- learning to get along with different people – adults and other students (i.e. social management)
- feeling calm
- feeling healthy
- being physically active

The combined positive responses (top two categories only) for each respondent group are provided in Figure 7.2 to allow direct comparison. Note that the results shown for the SBP Coordinator Survey are weighted average percentages for the three-year period (2015-2017).

Keeping in mind the highly variable sample sizes (see section 6.3), it is again interesting to note that stakeholders and students were typically more positive in their responses. The largest differences were evident for increased physical activity where only 59% of SBP Coordinators gave positive responses compared 78% of stakeholders and to 93% of students. This perhaps isn't surprising given that the SBP Coordinators and school staff may not have much direct knowledge of the level of students' physical activity outside the confines of the breakfast program or classroom.

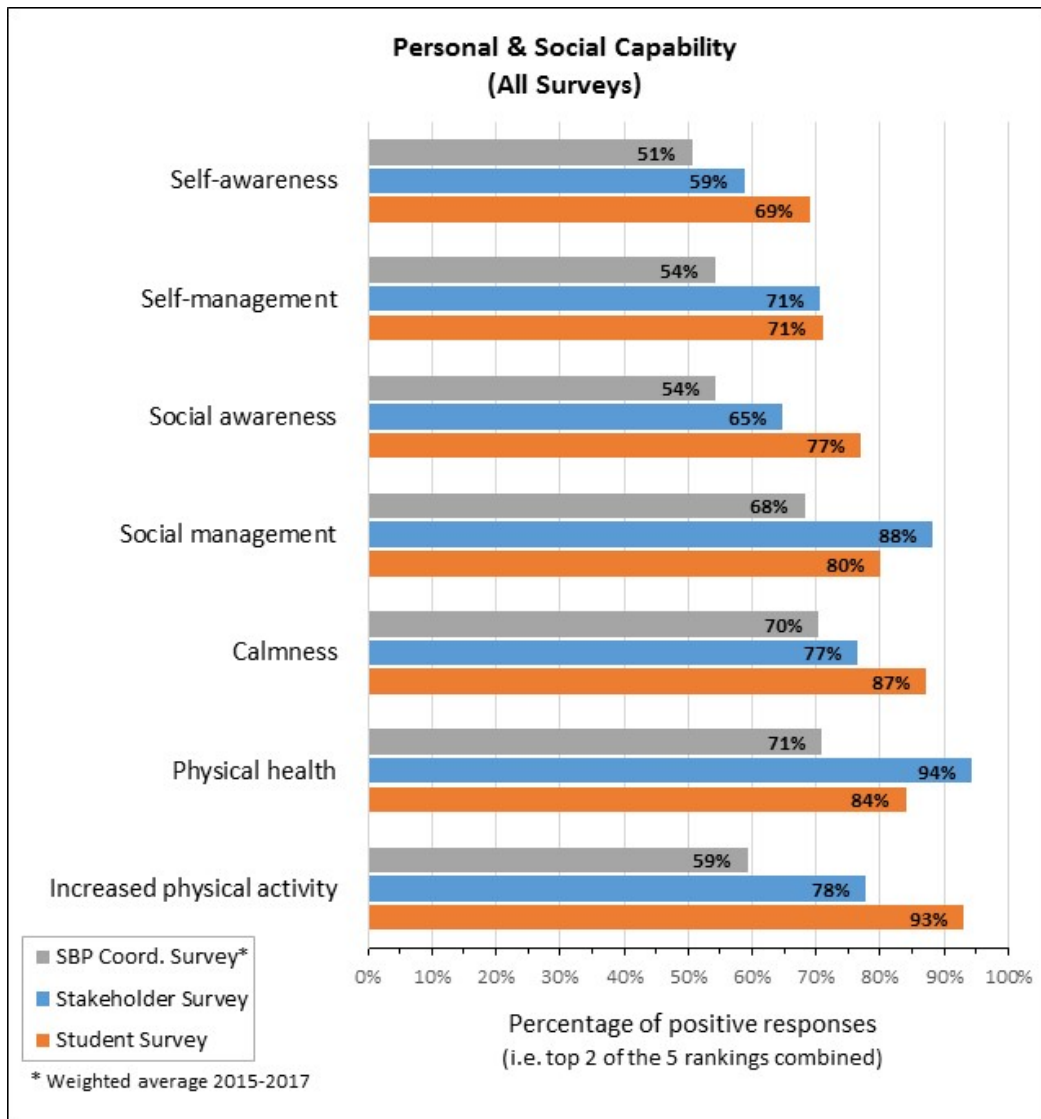
The other notable feature of the comparative data is that social management was rated more highly than self-awareness, self-management, social awareness by all three groups. This emphasis on social management is also evident in the qualitative survey and interview data.

*The school breakfast program has improved social relations through the shared meal model in which children sit around tables to share meals and engage in conversation with other students and adults. There are opportunities to develop conversation skills, turn-taking, listening and discussion of issues. (SBP Coordinator, Perth, Metropolitan)*

## 7.2.3 Student Survey - Group Comparisons

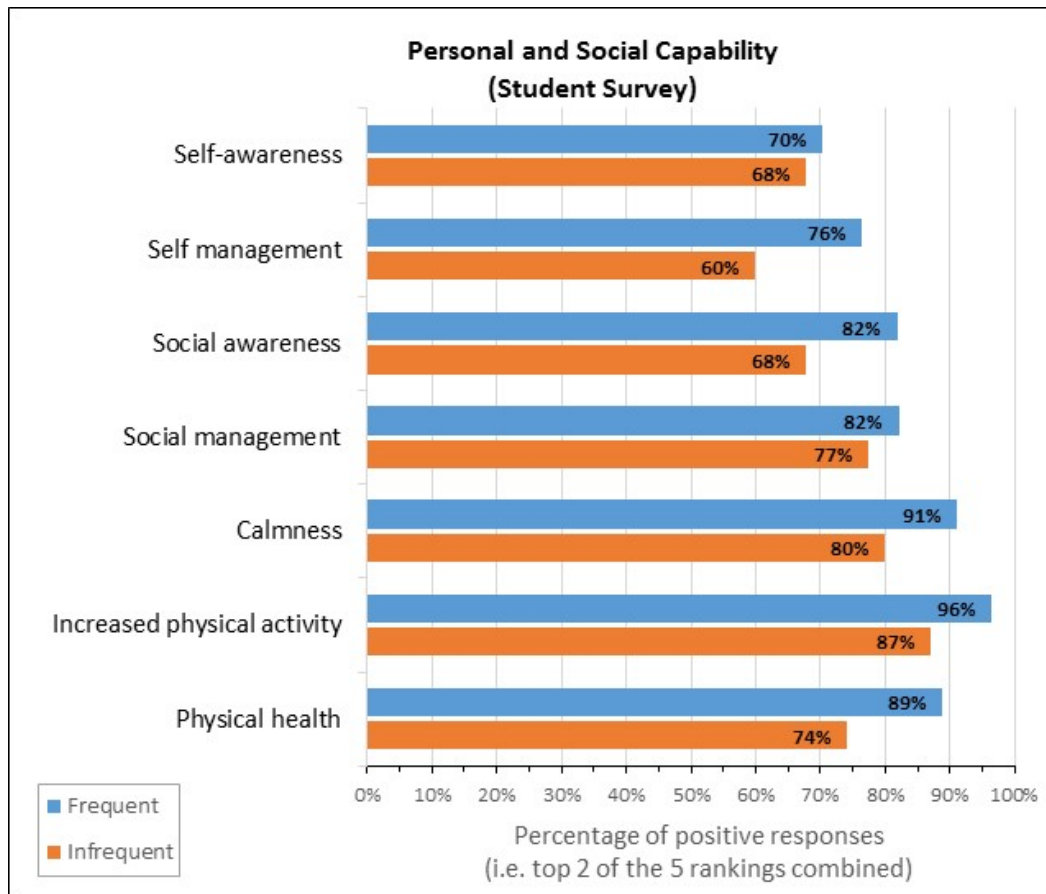
Group comparisons on the basis of gender, year group (Years 3-5 versus Years 6-10) and frequency of SBP attendance (frequent versus infrequent) were conducted using combined scores for the entire theme of personal and social capability. There was a significant difference between frequent and infrequent attendees only. As is evident in Figure 7.3 below, the students who attended the breakfast program 'always' or 'most of the time' reported higher levels of impact than the infrequent attendees for each of the personal and social capability items. The largest differences between the two groups were in relation to self-management and physical health.

**Figure 7.2: Comparison of the positive ratings of impact on children's personal and social capability from the SBP Coordinator Surveys, Stakeholder Survey and Student Survey**



Sources: SBP Coordinator Survey (2015-17), Stakeholder Survey and Student Survey

**Figure 7.3: Comparison of ratings of the impact of the SBP on personal and social capability by students who attend the SBP frequently versus infrequently**



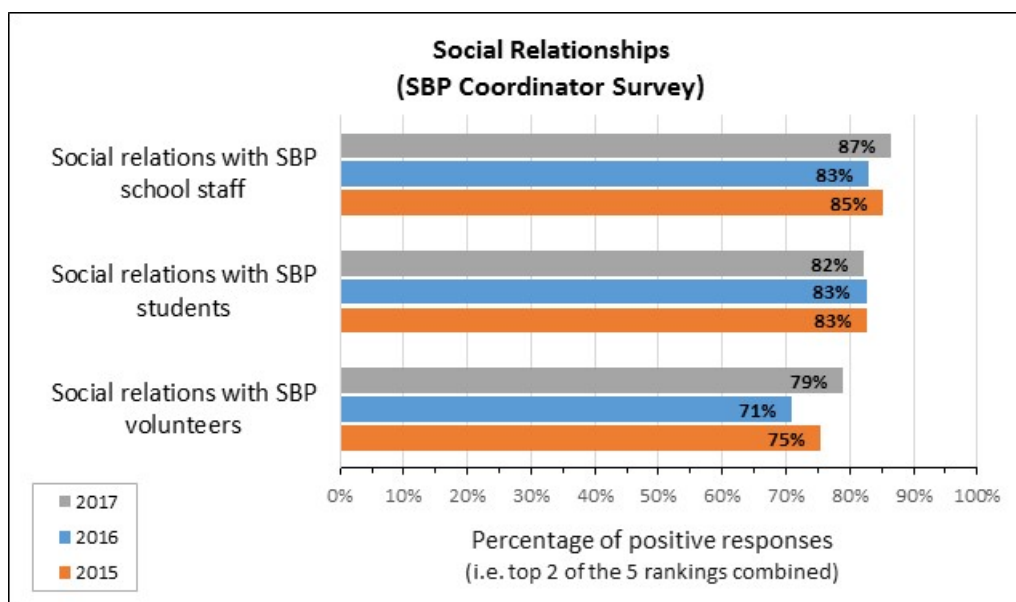
Source: Student Survey

## 7.3 Social Relations

### 7.3.1 SBP Coordinators' Ratings of Impact

As an extension of the investigation of students' personal/social capability, we also asked research participants to consider the role and influence of the SBP in building positive relationships between students and staff, between groups of students, and between students and parents/carers or other volunteers who assist in running the breakfast program. As shown in Figure 7.4, all were rated highly, with more than 70% of respondents in each cohort (2015-2017) indicating that all or most SBP students had been positively impacted. Social relations with school staff was rated slightly higher than for students/students and students/volunteers. The ratings for social relations with SBP volunteers were understandably lower since not all schools use volunteers in the running of their program.

**Figure 7.4: Comparison of ratings by SBP Coordinators of the positive impact on social relationships for 'all' or 'most' students, 2015-2017**



Source: SBP Coordinator Survey 2015, 2016 & 2017

### 7.3.2 Comparison of Impact Ratings by SBP Coordinators, Stakeholders and Students

Figure 7.5 presents a comparison of data on social relations drawn from all surveys. As noted in earlier sections, it was necessary to modify the wording of items for the students. Hence, students were asked to indicate how much they agree with the statements:

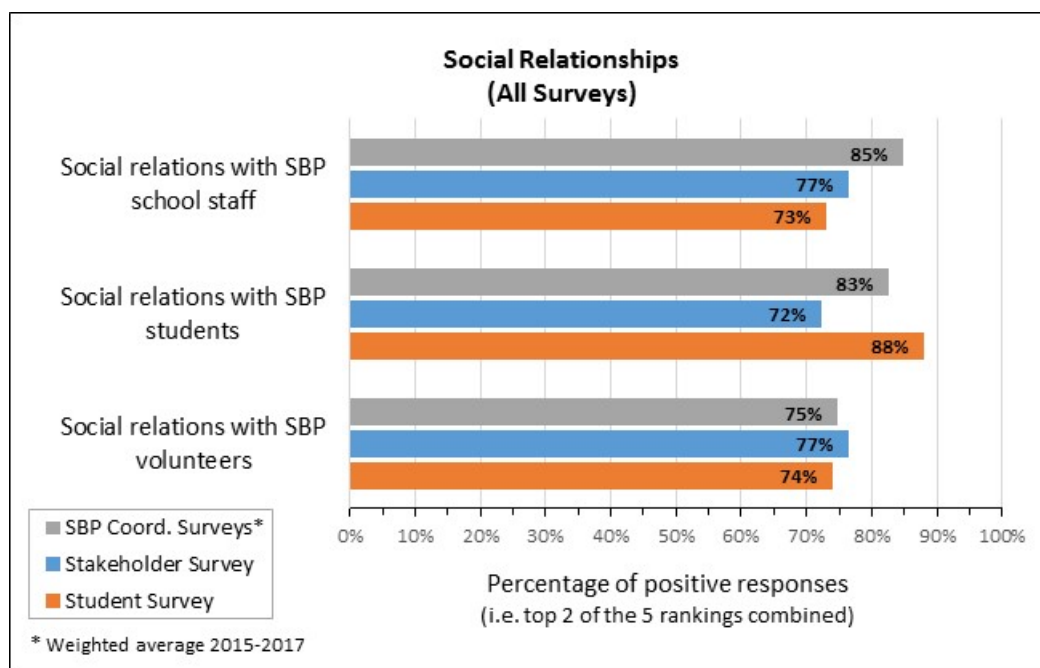
- Breakfast Club helps me get to know the teachers and other staff at my school (i.e. social relations with SBP school staff)
- I enjoy spending time with other students at Breakfast Club (i.e. social relations with SBP students)
- Breakfast Club helps me get to know the parents and other helpers at my school (i.e. social relations with SBP volunteers)

Once again, high proportions of the survey respondents gave positive ratings (>70%). Perhaps not surprisingly, the students placed more emphasis on their relationships with other students than with school staff and SBP

volunteers. SBP Coordinators tended to emphasise the positive impact on students' relationships with school staff, and this is borne out in the qualitative survey data and interviews.

*There are discussions that are much easier and less confronting we can have with kids when we are munching stuff. (SBP Coordinator, South West, Provincial)*

**Figure 7.5: Comparison of the positive ratings of impact on children's social relationships from the SBP Coordinator Survey, Stakeholder Survey and Student Survey**



### 7.3.3 Student Survey - Group Comparisons

In the Student Survey, two additional items were used to explore the influence of the SBP on students' social relationships and sense of school connectedness. Students were asked to indicate how much they agree with the following statements (using the five-point Likert scale ranging from 'very much' to 'not at all'):

- Breakfast Club has helped me make new friends
- Breakfast Club helps make school a good place to be

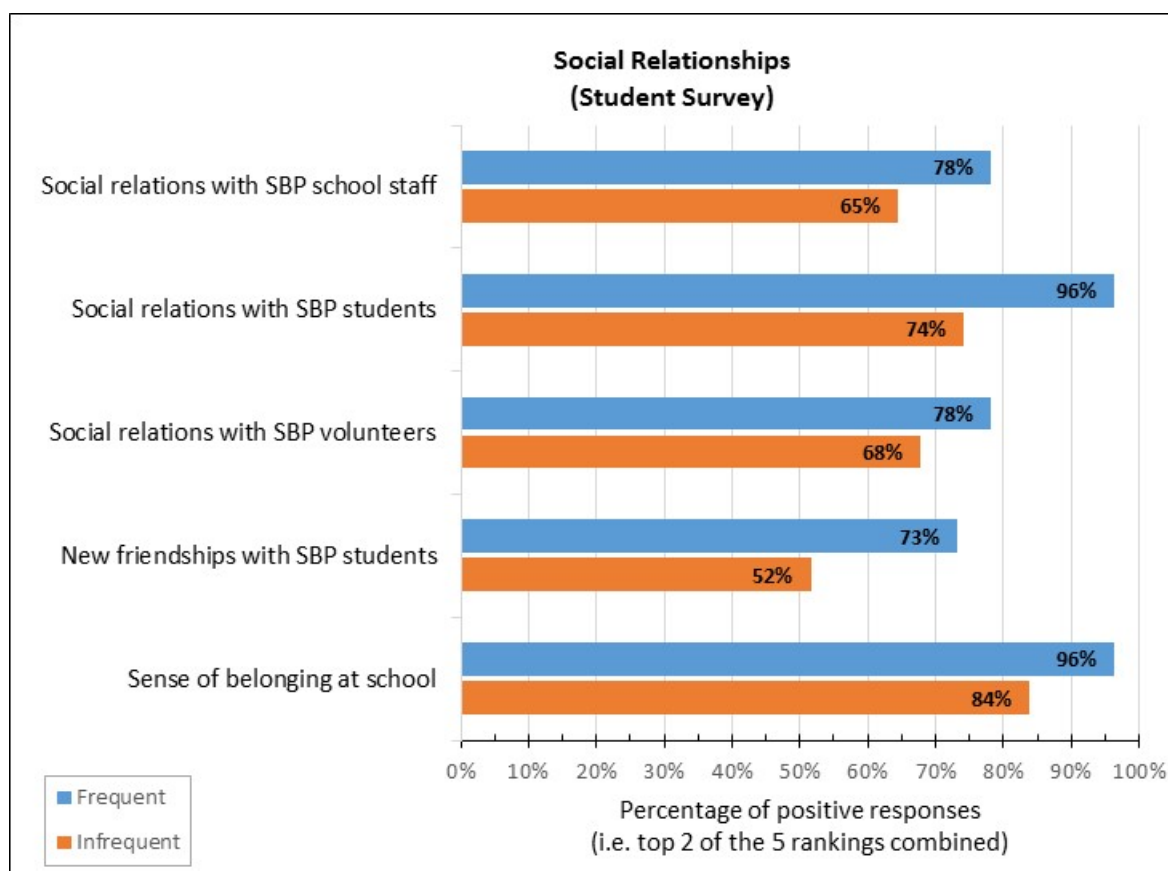
To aid readability in graphs, these items have been summarised as 'new friendships with SBP students' and 'sense of belonging at school', respectively. Figure 7.6 compares the ratings given by students who said they attended the SBP frequently versus infrequently. The frequent attenders responded more positively to all five items and placed particular emphasis on their relationships with fellow students and sense of belonging at school.

*Breakfast club has been really good for me to make new friends. (Year 5 Student – Student Survey)*

All five items relating to social relations were combined as a theme in order to test for possible effects of gender, year group and frequency of attendance at the SBP. Consistent with our previous group comparisons, a statistically significant difference was only found for frequency of SBP attendance<sup>19</sup> suggesting that more regular SBP attendance accrues greater social benefits for students.

<sup>19</sup> Median: Frequent attenders = 4.4; Infrequent attenders = 4.0. Mann-Whitney U test: z-value = 2.285, p = 0.022.

**Figure 7.6: Comparison of ratings of the impact of the SBP on social relationships given by students who attend the SBP frequently versus infrequently**



## 7.4 Qualitative Evidence of Impact on Personal/Social Capability and Social Relations

This section aims to elucidate how the School Breakfast Program functions as a vehicle for enhancing students' personal/social capability and social relations. It draws on comments provided by respondents to the SBP Coordinator Survey, Stakeholder Survey and Student Survey, and extracts from interviews with staff, parents and students in the case study schools.

Consistent with the quantitative survey results presented earlier, the qualitative datasets reflect a strong focus on the benefits that school breakfast programs have brought in developing students' social skills and their ability to successfully manage social interactions and develop positive relationships within the school setting. Students tended to focus on the opportunities that breakfast programs gave them to mix with a wider range of students and to make new friends. Teachers, SBP Coordinators and parents pointed out the positive benefits of students being able to interact with teachers and other adults in an informal setting. This was seen as building rapport and a sense of trust, which in turn meant students felt more supported and nurtured by the school. To illustrate some of the key themes relating to personal/social capability and social relations, a series of exemplar statements have been provided in Table 7.1.

**Table 7.1: Perspectives on the impact of the School Breakfast program on students' personal/social capability and social relations**

Theme	Representative Comments
<b>Social awareness/ Social management</b>	<p><i>It's great for students to mix with others outside of their usual year group. Older students lead by example in this environment and it's great to see the dynamics between the ages, some older students have shown a great deal of responsibility and leadership to the younger students in this environment and I can see an awareness in them of the impact of their behaviour on the younger students. (SBP Coordinator, Wheatbelt, Remote)</i></p> <p><i>Social management has most definitely shown an improvement. Dramatic improvement in confidence and social skills with several children. Mentoring by the older students of the younger children who are starting to come to breakfast club. Recognition of other people's needs. (SBP Coordinator, Perth, Metropolitan)</i></p>
<b>Social relations with staff</b>	<p><i>I mean they've [the children] just got everything that they need in the mornings. The teachers are all there making sure that they're right, they're not just left alone, the teachers are really, you know what I mean... they all have chats with the kids, and it's not like telling them what to do, they're kind of building rapport with the kids and stuff as well. ...Yeah, because they can chat to them there about their weekend, or what they did last night. It's just normal chat, it's not about school, and it's not disciplining them, or whatever, so then I think it makes the kids feel more comfortable with the teachers around the school. (Parent, School A, Perth, Metropolitan)</i></p> <p><i>It's a great forum outside of the classroom for relationship building between peers and staff. Informal environment and a chance to eat, chat and get things out of their system before the start of the day. (SBP Coordinator, Mid West, Remote)</i></p>
<b>Social relations with students</b>	<p><i>It's social. A lot of them come and socialise, they're having breakfast with their friends, so it's good. And a lot of the older ones look after the younger ones, too, I've sort of noticed, which is really good, so they help them out... They all interact with each other, because they might have to sit with someone else on a different table that's not their friend, so they're all going to be sitting there talking to each other. They talk to the teachers, so it's really good, and it helps them all to interact with each person, so it's really good. (Parent, School A, Perth, Metropolitan)</i></p> <p><i>They get to mix with others years that they would not normally mix with. They learn new social skills and learn what others are doing in the school. They often come to know older students and sometimes when things happen in the yard they feel more comfortable in going to older students for help. (SBP Coordinator, Wheatbelt, Provincial)</i></p>
<b>Making new friends</b>	<p><i>Breakfast club helps people like me understand how to make friends that were not our friends before and that the school teachers really care about us and to feel appreciative about ourselves and others. (Year 5 Student - Student Survey)</i></p> <p><i>You socialise a lot with people who you don't know, like teachers, maybe, and maybe kids, or students. And you make better friends. And then you're more popular. ...Yeah, you could go out there and hang out with mates, talk about upcoming events, talk about stuff, like, friends normally talk about. ...Well, whenever you get there [Breakfast Club], you would always usually sit with your mates and talk about stuff, and make more new friends. (Year 6 student - Interview, School A, Perth, Metropolitan)</i></p>
<b>Social relations with volunteers</b>	<p><i>The volunteers and community members have developed a rapport with the students and a better understanding and appreciation of them. (SBP Coordinator, Metropolitan)</i></p> <p><i>Whilst eating, volunteers engage students in constructive conversations with students. They have a number of positive interactions with a range of students from a variety of backgrounds and circumstances. (SBP Coordinator, Perth, Metropolitan)</i></p>



Table 7.1 (Cont.)

Theme	Representative Comments
<b>Sense of belonging</b>	<p><i>It improves the social skills of some students which makes the classroom more functional. It also brings a sense of belonging to those who may not be, or may not feel, as socially connected as others. It has a calming effect on some who might be prone to exaggerated mood/activity. (SBP Coordinator, Wheatbelt, Provincial)</i></p> <p><i>The breakfast club program helps to 'create an atmosphere of welcomeness' and friendship between staff - students, students - students! It has assisted the students in feeling like they belong to our school! (SBP Coordinator, Wheatbelt, Remote)</i></p>
<b>A safe place to be</b>	<p><i>I like breakfast club when you can interact with other people... You can make more friend, it helps me come to school every day, it makes you more prepared for the future like washing yor own dishes. When your parents go to work early and you cant have breakfast you can come to breakfast club and have a toast and milo while you are playing a game or helping out. I feel safe to come to breakfast club, when you are shy to come to school you can come here and make more friend. You can get closer to your community and to your school. [sic] (Year 5 Student - Student Survey)</i></p> <p><i>Students will have had an opportunity to talk with others and discuss any worries with an adult. This assists students in moving into class in a calmer state of mind. The Breakfast Club is a safe space within our school for many of our students. (SBP Coordinator, Remote, Pilbara)</i></p>

## 7.5 Summary / Key Points

- As part of a broader investigation of impact on human capacity and community cohesiveness in the SBP schools we considered the influence of the SBP on students' personal and social capability and, by extension, their social relationships with adults (staff and SBP volunteers) and peers.
- The indicators used for personal and social capability were: self-awareness, self-management, social awareness, social management, calmness, physical health and increased physical activity.
- While the overall ratings for impact on personal and social capability were somewhat lower than impact on capacity for learning, they were nevertheless consistently positive.
- Social management, calmness and physical health received the highest ratings from most stakeholder groups.
- Students placed greater emphasis on calmness and increased physical activity than other stakeholder groups.
- Students who attended the SBP more frequently gave higher ratings for impact on personal and social capability than those who attended infrequently.
- Investigation of the role of the SBP in building social cohesion focused on the relations between staff and SBP students, relations within/between SBP students, and relations between SBP students and SBP volunteers.
- The ratings for social relationships were high (>70%) for all stakeholder groups.
- Students placed greater emphasis on their social relations with other students. Adult stakeholder groups placed greater emphasis on students' relations with staff and SBP volunteers.
- Qualitative evidence showed the SBP affords important opportunities for students to develop their social skills, build positive social relations within the school setting and learn how to manage social situations.

- The SBP was seen to provide students with the opportunity to mix with a wider variety of people and to make new friends.
  - For many students, the School Breakfast Program contributes to a greater sense of belonging and is viewed as 'a safe place to be'.
-

## 8. Impact on School-Community Relationships

- EQ6 Has there been increased human capacity and community cohesiveness in targeted schools and communities?
- EQ7 Is the program good Value for Money?
- EQ9 Have program participants (staff, community organisations, community members) been satisfied with the program?

### 8.1 Introduction

Continuing with the theme of social relationships, in this chapter we present evidence regarding the broader benefits or impact of the School Breakfast Program on the whole school environment and the implications for community cohesion. The evidence is drawn from the SBP Coordinator Survey, Stakeholder Survey and case study interviews. We begin by examining the community partnerships that have developed out of the SBP and then consider stakeholders' perceptions of impact at the whole school level and satisfaction with the program.

### 8.2 Community Partnerships and Support

As noted in Chapter 4, a substantial minority of schools (20-25%) receive help from the local community (i.e. other than parents/carers or students) to run their breakfast program. In some cases the level of support is substantial, such that an outside organisation or individual(s) manages and runs the whole SBP, or takes responsibility for the program on set days of the week. More commonly, however, schools draw on community volunteers from charities, youth groups, local churches, senior citizens groups, retirement villages, and so forth to boost staffing levels, or to assist on particular days, or for set periods of time (such as university students completing assignments or a practicum).

*When the program started the school approached the local council for ways to recruit volunteers and this was posted through their site. We then selected a volunteer from a retirement facility who has run the food preparation side of the program with extra volunteers she has recruited. (SBP Coordinator, Perth, Metropolitan)*

Support from the wider community also comes in the form of food donations or funding to purchase equipment and/or consumables. As seen in Chapter 5, schools boost their food product range through donations from retail stores (e.g. Coles, Woolworths, IGA), bakeries (e.g. Brumby's, Baker's Delight), local growers (for fruit and vegetables) and/or farmers (for milk and eggs), or other food producers. Some schools report that they receive additional food or meals from another feeding or food rescue program such as SecondBite (a program conducted in partnership with Coles), Manna (a Perth-based charity that provides meals for disadvantaged individuals and families), or OzHarvest - a perishable food rescue organisation. Others have received grants to purchase equipment or improve their SBP facilities. A few remote schools have formed partnerships with local or regional businesses to assist with transportation and/or storage of their food products.

*Our local Rotary Club heard about our Reading and Breakfast Club and came along to have a look. They have donated money to enable us to keep our programme running efficiently and effectively. (SBP Coordinator, Great Southern, Provincial)*

Within the large volume of data collected via the annual SBP Coordinator Survey, there is substantial evidence that schools can be very creative and resourceful in seeking support from their local community. Despite this, some schools report great difficulty in recruiting volunteers and state that they do not partner with community organisations or groups at all in the running or resourcing of their breakfast program. One school reported that the level of disadvantage in their student population was such that volunteers needed to have a very strong social conscience in order to cope with the attitudes and behaviours of “young people who have been overlooked, disempowered and disadvantaged”. It is striking, though, how few schools spoke of any behaviour difficulties in running their program. The weight of evidence (as presented in Chapters 6 and 7) points to SBPs as positive social environments that foster relationships between students, staff and volunteers.

*Community Partnership with mining companies in the area, who provide fresh fruit and vegetables. (SBP Coordinator, Goldfields-Esperance, Very Remote)*

*Our local...church op shop regularly donates profits from their shop to our Breakfast program. Our local IGA has enabled us to hold a sausage sizzle outside the shop to raise funds for breakfast. (SBP Coordinator, South West, Provincial)*

*The school offered breakfast 3 days per week. Our school was approached by Manna and after negotiation was introduced to a commercial company that wished to become involved with their broader community. Jason windows now assist with manpower and funding two days per week. As such, breakfast is now able to be offered 5 days/week (SBP Coordinator, Perth, Metropolitan)*

We have seen (Chapter 4) that some schools attribute their difficulties in garnering community support to factors such as language barriers, cultural factors and remoteness of location. These factors are certainly pertinent to the five case study schools, yet they have demonstrated there are ways to circumvent or overcome these factors and build a successful breakfast program. School A, for example, that caters for more than 40 different language and cultural groups, has been able to create a greater sense of community cohesion by opening up its breakfast program to parents and families. The school has successfully recruited reliable volunteers and receives support from a range of local businesses and charities. School E, on the other hand, is located in a remote Aboriginal community with limited access to outside assistance, yet has been able to recruit committed local community members to run their breakfast and lunch program in a paid capacity and thus boost the school's standing and reputation in the community. The school elects to commit some \$80,000 per year to its feeding program, seeing that this substantial investment “over a long period of time...pays off for the general health of the kids, and their ability to learn long-term” (Principal).

In Chapter 4, we proposed that the extent to which the SBP is embedded within a whole school focus on health and wellbeing may influence the level of access to resourcing support and ‘value add’ that can be generated. The following comment from one SBP Coordinator provides an apt description of the positive flow-on effect of the school's ethos and focus on care and community:

*Local business and council and community see a caring and support[ive] environment and assist where they can. The school is also perceived as caring and willing to support those in need, not just in the educative sense but also as supporting community members. (SBP Coordinator, Perth, Metropolitan)*

As will be discussed in Chapter 11, community engagement also has implications for the sustainability of the SBP.

### 8.3 Whole School Impact of the SBP

Closely connected to the issue of community engagement is the extent to which the SBP is seen as having an impact on the overall functioning of the school at the whole school level. Via the SBP Coordinator Survey, a large majority of schools (>80%) indicated that the impact of the SBP was not limited to the students who access the program, but extended to the whole school community. The theme most strongly evident in respondents' descriptions of impact was the important role the SBP plays in promoting social inclusion, building school connectedness for students and families, and generating a stronger sense of community. This was true of metropolitan schools and those based in regional and remote communities. Some respondents described the social benefits of the SBP as being a natural consequence of the school actively demonstrating its care and concern for the wellbeing of students and families. Others focused on the role of the SBP in increasing parental involvement which led to more positive school-community relationships. In some cases, expanding the program to five days per week was an important catalyst for improving relationships between staff and students, and/or staff and parents.

*This year we have run breakfast club differently involving more students and staff and also more regularly. It has been something that students involved in look forward to, where they build new relationships and also develop new skills. It builds a greater sense of community within the school environment which in turn benefits the entire school community not just those involved in breakfast club. (SBP Coordinator, Wheatbelt, Remote)*

*[Breakfast Club] has helped promote greater school community cohesion as it has encouraged parents to be more involved and active in the school context. Additionally, the sense of feeling cared for and the benefits of having a decent breakfast (not starting the day hungry) flows onto benefit the students' learning and the classroom environment as well. The whole school is supportive of this program and teachers have volunteered to fill in when needed as well. The practical and psychological/emotional benefits both individually and corporately confirm the value of this program. (SBP Coordinator, Perth, Metropolitan)*

As noted in previous chapters, case study School A extends its breakfast program to include parents and families. The SBP is a key component of the school's pastoral care program and is seen as an important vehicle for building school-community relationships. In the following interview extract, the Principal of School A describes the value of the SBP in breaking down barriers and developing more cooperative relationships with parents:

*The Breakfast Program has helped to develop a positive atmosphere within the school community. Also, the relationships that have developed between volunteer staff /students and the participating students have been positive and noticeable. (SBP Coordinator, Great Southern, Provincial)*

*...it has a positive impact with some tough parents who may not have shared a brilliant relationship with the school. We've been able to bring some of them in - and they've been quite negative in the past - but the informal...conversations we're able to have with them as staff members just changes the relationship a bit. It's more informal, it's more social at breakfast club. And so it allows them to see you more as a person, and not as a principal, or the teacher, or the deputy, and they're more approachable when we need to have the tougher conversations, or when they feel more comfortable to come in and have a chat to us about some of their concerns ... because they see us in a different light. And I think that's important. (Principal, School A, Perth, Metropolitan)*

There were similar benefits in building positive personal relationships with students via the breakfast program:

*...If you've just given the kid a breakfast in the morning, and then they're having a rough day later on, and you then are interacting with them, they're less likely to be as ready with the anger and all the rest of it. "I saw you at breakfast club today, you started the day off really well," and*

*then that kind of softens the whole tone. ...[It's] about building that personal relationship with the kids, and the parents, so that when those tough times come, it's harder for those kids then to be irrational when they've established something a bit more personal with you. (Principal, School A, Perth, Metropolitan)*

Echoing the evidence presented in Chapters 6 and 7, respondents commonly referred to whole school impact in terms of improvement in student attendance, greater readiness for learning, and more engagement in learning. Others focused on the influence of the SBP in improving students' social skills and behaviour.

*The option for all kids to access breakfast if needed makes students feel better and concentrate more readily. This impacts attention, behaviour and quality of learning in all classrooms across the school. It also improves attendance across the school because parents are not keeping kids home to wait for the shop to open if there is nothing in the house for kids to eat before school. (SBP Coordinator, Kimberley, Very Remote)*

In case study School D, the SBP was described as contributing to a wider strategy aimed at increasing attendance and reducing antisocial behaviour within the community:

*There is a remote school's attendance strategy here... and they get together each month with other service providers such as the police, [other local program providers], and schools to increase attendance, because that's got a lot of correlation with reduced crime in the area. There has been... some vandalism and break ins and those sorts of things. So, I guess the more the kids are going to school then the less those things are happening. The school holiday program ...is a pretty good example of how keeping the kids engaged reduces crime... The stats were something like ... 31 reported incidences this time last year and ... only three this one round. They had a pretty comprehensive school holiday program where they were running stuff during the day and well into the night and running the kids ragged. So, the same would show for when kids are at school, they're engaged and they're not doing those things. (Director of Special Program, School D, Gascoyne, Remote)*

Some school representatives felt the SBP was important to the whole school community because it supports students who are disadvantaged, at risk, or struggling because of hunger and food insecurity. Others described the benefits for the school community in terms of the healthy eating practices that are promoted and the emphasis on hygiene and cleanliness.

*The Breakfast Program helps to put a positive outlook about school in the minds of not only students but the families of the school. The Community appreciate the Breakfast Club being provided for children who for whatever reason do not have breakfast before arriving at school. It makes everyone feel included. (SBP Coordinator, Goldfields-Esperance, Remote)*

## 8.4 Satisfaction with the School Breakfast Program

From the evidence amassed over the course of the evaluation, there can be no doubt that the School Breakfast Program is a highly valued initiative. Comments from many schools point to an appreciation of the quality of service provided by Foodbank WA staff and the flexibility of the service delivery model that allows schools to tailor it to their needs and community context.

*The service that Foodbank offers in supporting these programs is invaluable. The quality of food and the helpful staff at the food collection centre means schools are able to create these programs and continue them in a sustainable manner. (Perth, Metropolitan)*

Importantly, schools have taken the opportunity afforded by the SBNEP evaluation to provide clear feedback that the School Breakfast Program should continue to be supported – first and foremost to ensure that the nutritional needs of

*It's a great program and one that can be used in all different school scenarios across the state. (Goldfields-Esperance, Very Remote)*

*It's so simple, so easy to provide, and yet has such far-reaching positive effect to the whole school community. (SBP Coordinator, South West, Provincial)*



vulnerable children are met. Beyond that, schools recognise that *not* running the program would have negative ramifications for their teaching and learning program and school-community relationships. To follow are some illustrative examples of comments from SBP Coordinators and case study participants:

*Its a healthy place to be when you are hungry & its a nice way to start the day [sic]. (Year x student, Student Survey)*

*It's a really good program for us. We would love to see it continue, it contributes to the fabric of our school, helps us become calm and consistent, and all those sorts of things. Hate to see it go. It's a really worthy thing, and if people are looking at funding and all the rest of it, it's something that's really needed in this part of the world. We wouldn't survive without it in lots of ways. It would just make life 20% more complicated, straight up. (Principal, School E, Kimberley, Very Remote)*

*I don't want there to be a time that we can't provide breakfast club to our students. It has become an integral part of the school environment. (SBP Coordinator, Perth, Metropolitan)*

*It is important for schools. The benefits are difficult to measure, but the impact is obvious. (SBP Coordinator, Wheatbelt, Provincial)*

*We believe it makes an important difference to the lives of a significant number of our at risk students. If their physical needs are met we can then concentrate on assisting them with their emotional and learning needs. (SBP Coordinator, South West, Provincial)*

*We see the School Breakfast program as an essential aspect of allowing this school to run efficiently. It is important that we are able to provide breakfast and sometimes recess/lunch for children who are hungry and the Chaplain's Program and Foodbank WA allow us to do that. (SBP Coordinator, Perth, Metropolitan)*

*Foodbank provides an exceptional service which without it we would find it difficult to feed the students whose nutritional needs are significant. (SBP Coordinator, Goldfields-Esperance, Very Remote)*

*The school community appreciate the support provided to our students who come from homes of high risk. (SBP Coordinator, Wheatbelt, Provincial)*

*Extremely low socio-economic area. Many students do not have access to healthy food on a regular basis other than that from the school. Foodbank does an amazing job in helping us support our students and their families when in need. (SBP Coordinator, Mid West, Very Remote)*

## 8.5 Negative Effects of the SBP

While the participating schools have been extremely positive about the value of the SBP and its impact on students and school communities, it is important to consider whether running a breakfast program may have negative consequences, even if unintended. Concerns were expressed by a small minority of schools (approximately 15%). Some of these centred on the possible shifting of parental responsibility on to the school – expressed either as a philosophical viewpoint held by others in the school community (staff or other parents), or as personal concern that the SBP may encourage a sense of expectation and dependency within the community. For example:

*School psych & I believe there is a level of negative co-dependency from parents in the community. We're feeding students who aren't being looked after at home properly, which in turn alleviates the parents from their responsibility to care for their children properly. After surveying a number of students that attend breakfast club, it appears the main reason students eat at breakfast club is because they wake up late and it's easier to eat at school, rather than wake up earlier and make breakfast. I don't know if breakfast club is being used effectively here, I don't*



*believe it's helping young people build good, healthy habits for their future. I would love advice or consult from Foodbank of how to best run breakfast program in my school. (SBP Coordinator, Metropolitan, Perth)*

*Some people grapple with the concept of the 'Breakfast Program'. Mainly because they feel that it takes away the responsibility of the parents and also that it teaches entitlement to the students. We have looked at changing the way we run the program. i.e. students cook and prepare their own breakfast and help with the younger students. They also have to do their own dishes. (SBP Coordinator, South West, Provincial)*

*Some parents see this as another hand out and others taking responsibility for their children. Means they sit back and spend what should be spent on food for breakfast and lunch on things that have a negative effect on the children (SBP Coordinator, South West, Provincial)*

To avoid this sense of dependency and keep disadvantaged parents/carers involved in feeding their own children, one very remote school has adopted a novel approach to their SBP:

*We run our school breakfast program discreetly and only offer a basic meal of weetbix or sometimes toasted sandwiches as to not take responsibility away from parents to meet basic needs of their children. When parents are in need we offer to take breakfast products to the home so they can continue to be the provider for their children and share the meal with them. (SBP Coordinator, Kimberley, Very Remote)*

As foregrounded in Chapter 4 (Section 4.2.5), a few schools raised concerns about the possibility of stigma or a sense of shame associated with needing to access the SBP. However, steps were taken to counteract this by widening the level of access to the SBP so that it is not seen as redressing poverty or neglect.

*Some people have viewed it as charity for poor children hence the name change to Second Breakfast Club and the introduction of our Bus students. This has changed the perception quite dramatically. (SBP Coordinator, Provincial, Great Southern)*

*I have always had concerns about negative remarks that some people do make with regard to those attending Breakfast Club. Anyone is welcome at ours, but I have seen some where it is believed that they are only for those who don't get fed at home. This can lead to some pointing fingers and saying things like "Typical, not being fed" or parents telling their child "don't go there or I may get in trouble". End result being.... the ones that are in most need don't come. This be it because they are worried what people will think of them, or do. We are there to help, not judge... (SBP Coordinator, Great Southern, Provincial)*

*There can be negative effects if one is not careful. There can be a perceived stigma attached to attending Breakfast Club, in that it is 'only for poor students.' We purposefully encourage all students to come and join us, and we regularly remind students where it is held. Thus, I don't believe we have any negative effects occurring in our school environment. (SBP Coordinator, South West, Provincial)*

Finally, some schools reiterated their concerns about the pressures on staffing and resources that the SBP can bring, as illustrated in this example:

*This impacts staff and becomes one more thing they do. At the beginning of the program there was excitement and support from parents who were helping out/volunteering at the SBP. This has waned of late and this extra work has been taken on by some staff. This issue has been raised at P&C who are keen for the program to continue and they will seek parents to support. (SBP Coordinator, Goldfields-Esperance, Provincial)*

## 8.6 Summary / Key Points

- Approximately one-quarter of schools receive help from their local community to run their SBP that may include food donations from local businesses, financial support to purchase supplies, or hands-on support from volunteers to prepare and serve breakfasts.
  - Outside volunteer are sourced from charities, local businesses, senior citizens clubs, retirement villages, church groups, youth groups, and education programs.
  - Schools that are visibly caring for the wellbeing of students and families in the eyes of the local community are better able to secure support from local businesses, community organisations, and parents and families.
  - More than 80% of SBP schools believe their program has a positive impact on the whole school community.
  - Schools emphasise the value of the SBP in promoting social inclusion, building school connectedness for students and families, and fostering a stronger sense of community.
  - Other benefits of the SBP seen to flow to the whole school community include improvement in student attendance and capacity for learning, and reduction in behavioural problems, including the incidence of antisocial behaviour beyond the confines of the school.
  - The SBP has a positive influence on students' knowledge and awareness of healthy eating and hygiene standards which may be translated into homes and the wider community.
  - Schools are very satisfied and supportive of the School Breakfast Program. It is seen as essential in order to meet children's hunger and nutritional needs and for the effective running of the school.
  - The majority of SBP schools (>80%) do not believe the program has any negative effects on the school or wider community.
  - A few schools have concerns that the SBP may facilitate an abdication of parental responsibility and/or promote a culture of dependence within the community.
  - Some incidences of community stigma or shame surrounding the need to access SBP were reported, but these schools increased the level of access or repositioned the program to remove the perception that the SBP was addressing poverty or neglect.
  - Concerns about staffing levels and access to volunteer support were reiterated by a few schools.
-

## 9. Impact on Children's Attitudes to Healthy Eating

EQ3 Have children's attitudes towards healthy food and nutrition improved?

### 9.1 Introduction

In this chapter we shift the focus to consider the impact of the SBNEP on children's attitudes to healthy eating. (The impact on children's knowledge and skills relating to healthy eating will be addressed separately in Chapter 10.) We begin by considering the influence that schools can exert through their school breakfast programs, and then examine the evidence regarding the short term impact that participation in a *Food Sensations* nutrition education session has on children's attitudes about healthy eating.

### 9.2 Impact of the School Breakfast Program

In accessing the School Breakfast Program and eating products supplied by Foodbank WA that comply with the Department of Education's Healthy Food and Drink Policy, students are being exposed to healthy food choices that they may not necessarily encounter in the home. A few schools reported that they do not do any 'intentional' nutrition education through the SBP, however the majority seek to value-add and use the Breakfast Program as a vehicle to foster positive attitudes to healthy eating and promote healthy lifestyle choices. Via each of the survey instruments, stakeholder groups (SBP Coordinators, stakeholders, students) were asked to rate the extent to which the SBP had a positive influence on students' (a) attitudes to healthy eating, and (b) willingness to try new foods. Figure 9.1 compares the results derived from the three groups by combining the top two positive response categories for the five-point Likert scale used in each instrument. By coincidence, the weighted average percentages for the SBP Coordinator Surveys (2015-2017) were the same as the percentages derived from the Stakeholder Survey. What is striking in these results, however, is that the students were much more likely to attribute positive impact to the SBP than the adult groups, with differences as high as 28 percentage points.

As noted in Chapter 1 (Table 1.2), with support from Healthway and other sponsors, Foodbank WA has developed a range of resources for schools to help promote healthy eating messages, based around a series of engaging 'Superhero Foods' characters. Approximately a third of schools indicated they use the Superhero Foods placemats, playing cards, posters and/or storybook in their breakfast program and that this has helped to pique students' interest and generate conversation about healthy food choices. The reported level of use is consistent with a recent internal evaluation

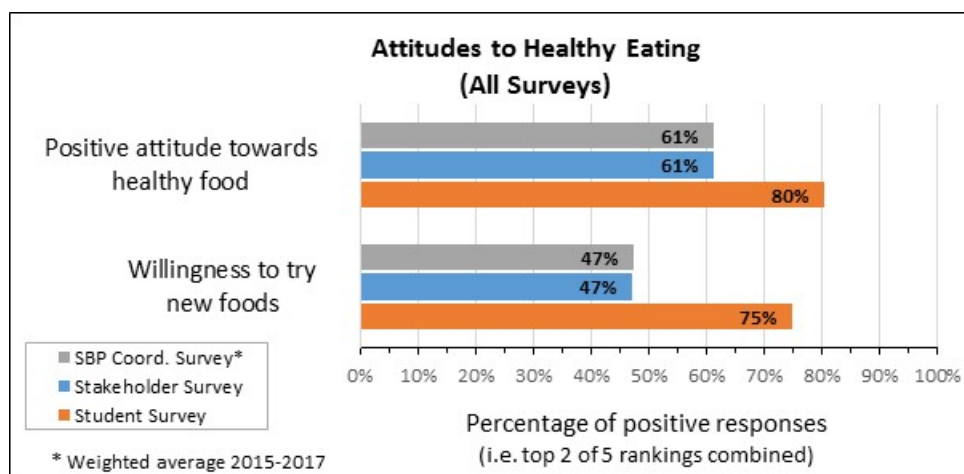
*It is part of our Healthy Eating and Activity Policy. We involve hygiene activities and life skills activities into the breakfast club time. (SBP Coordinator, Kimberley, Very Remote)*

*I also have not come across a student yet who isn't willing to try a food that they haven't tried before when they come to Breakfast Club. I say "just try a small bit and if you don't like it, you can leave it. But if you like it then you can have more." (SBP Coordinator, Great Southern, Provincial)*

*The students sit and discuss what is on their placemat. Apart from teaching them about healthy food, it provides an excellent opportunity for conversation. A large majority of the students who attend breakfast club have social issues. (SBP Coordinator, Metropolitan)*

conducted by Foodbank WA of the Superhero Foods initiative which found that 50% of SBP schools that cater for primary students had one or more teachers registered to access the Superhero Foods resources [178].

**Figure 9.1: Comparison of positive ratings of impact of the SBP on children's attitudes to healthy eating**



Sources: SBP Coordinator Survey (2015-17), Stakeholder Survey and Student Survey

### 9.2.1 Contribution of SBPs to Broader Health Promotion Programs

A majority of respondents (>70%) across all three SBP Coordinator Surveys indicated that their school breakfast program had a very strong or strong impact on the health promoting environment of the school. To gauge how SBPs might contribute to a broader school focus on health education and student wellbeing, SBP Coordinators were asked to comment on its integration with other school-wide or classroom-based programs or activities. Many of the primary schools were also registered for Crunch&Sip, a program aimed at increasing awareness of the importance of eating fruit or vegetables and drinking water every day. SBP schools in the metropolitan area or in reach of a Foodbank branch can access fresh produce for their Crunch&Sip program, and SBP Coordinators noted that this is highly beneficial in ensuring that all children can participate.

*Foodbank products are a huge benefit for the operation of Crunch & Sip as not all students are able to attend with a piece of fruit or veg, but are quite happy to sit with the group and feel included when they are able to be given a choice of something to eat, be it fruit or veg that has been provided by Foodbank. (SBP Coordinator, Great Southern, Provincial)*

*We integrate the Breakfast Program into our weekly Cooking (D&T) lessons, and do this on a Friday so we can share the spoils with community members who attend our Friday assembly. We also incorporated the Breakfast Programme into our Gardening project when we harvested and cooked/prepared fresh vegetables as part of our daily meal. (SBP Coordinator, Very Remote, Kimberley)*

A few schools directly integrate the SBP with vocational education courses and involve students in planning, cooking and serving breakfast to fellow students. Others incorporate it into their kitchen garden program (which in turn may link to several curriculum areas), or to cooking lessons linked to the Design and Technology learning area or programs aimed at developing students' life skills. At a more social level, schools may use the breakfast program and Foodbank-supplied products to host whole school activities such as community breakfasts and school camps, or celebrate and promote special events such as Mental Health Week.

*Certificate II Community Services with a food focus. Students plan a menu for each term, prepare, cook and service breakfast to students as part of their evidence source work. They enjoyed and valued how they felt preparing and serving breakfast to students. The class decided to continue helping with breakfast club in their own time for a full extra term. (SBP Coordinator, Metropolitan)*

## 9.3 Impact of Food Sensations

As noted in Chapter 1, *Food Sensations* sessions are typically 90 minutes in duration and include interactive classroom activities and a hands-on cooking lesson in which every child helps to prepare one or more healthy dishes that are then shared with the whole class. Classroom teachers are asked to complete a post-session evaluation, while students complete an evaluation sheet before and after each *Food Sensations* session aimed at gauging change in their knowledge, skills and attitudes to healthy eating. Since learning and attitudinal change are unlikely to occur if the lesson content is unsuitable or not engaging for students, we begin by considering the appropriateness of the content from the classroom teachers' perspectives, and whether or not students and teachers enjoyed participating.

### 9.3.1 Appropriateness of Food Sensations Content

Figure 9.2 presents the teachers' ratings of the *Food Sensations* sessions based on 178 responses. With only one or two exceptions, teachers strongly agreed or agreed that the sessions were suitable for their students in terms of age, literacy and numeracy levels and social context. This reflects the commitment that the *Food Sensations* teams have made to ensure at risk and disadvantaged students can participate fully. This has included investing in targeted professional development for presenters on classroom management to ensure sessions run smoothly and safely, and that students gain maximum benefit. *Food Sensations* staff report that the cooking lessons are tailored to the needs of particular schools or communities. For example, considerable planning goes into ensuring that the recipes used in the sessions are based on ingredients that can be sourced within the local community (such as the community store) so the dishes can be replicated at home. *Food Sensations* staff are currently developing further Superhero Foods characters based on bush tucker to make the healthy food messages more relevant and relatable to Aboriginal students and communities.

*We loved that you asked questions and were flexible to change your plans when things were not working for our Ed. support students. (Teacher, Mid West, Provincial)*

*The use of visual resources as well as oral presentations allowed all abilities to access the information. (Teacher, Wheatbelt, Provincial)*

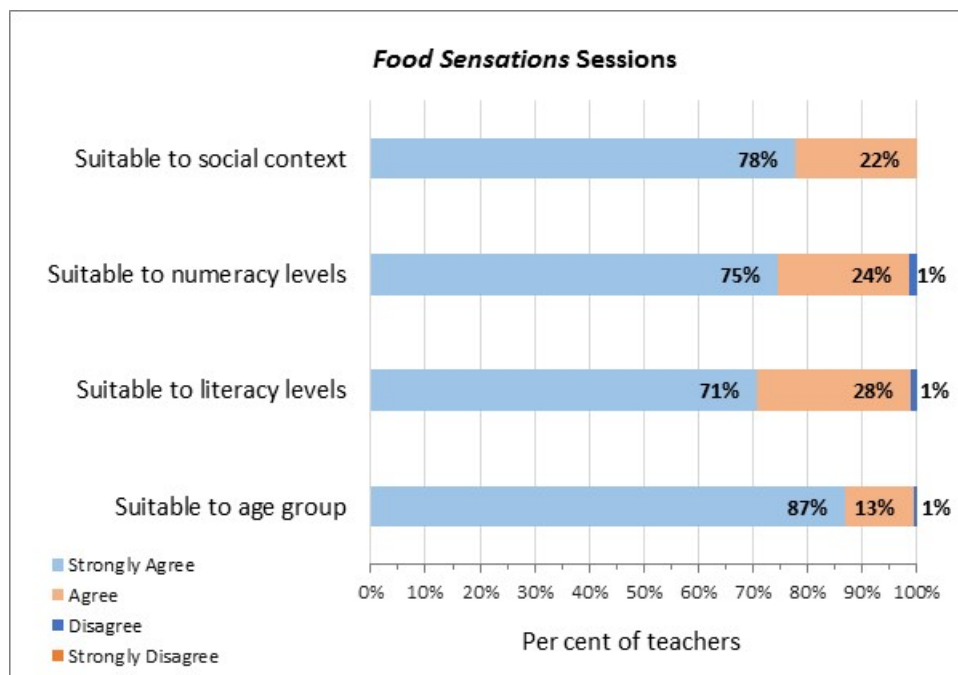
*It was a great session, with a good balance of theory and practical components. Thankyou. (Teacher, Peel, Metropolitan)*

*...Comment from my class: 1) Overwhelmingly loved eating and tasting healthy food. 2) Loved making different food. 3) Appreciated that you trusted them to use the equipment e.g. knives and hot saucepans. (Teacher, Perth, Metropolitan)*

Teachers whose students participated in *Food Sensations* made many positive comments about the structure and content of the sessions and skilful handling of the cooking activities. They were also complimentary about the organisation and planning of the sessions and level of communication with the *Food Sensations* team.

*I believe this excursion has been the best organised and run of any excursions I have done with classes. The preparation of materials and expertise and knowledge of the presenters was excellent. I could not fault a single part of today's experience. The children and my staff thoroughly enjoyed it. Well done to all at Foodbank. (Teacher, Perth, Metropolitan)*

**Figure 9.2: Teacher ratings of the suitability of *Food Sensations* sessions**



Source: *Food Sensations* Teacher Evaluations 2016 & 2017

### 9.3.2 Student Enjoyment of *Food Sensations* Sessions

In keeping with their positive comments about the suitability of the *Food Sensations* content, all of the teachers agreed that their students had enjoyed taking part in the session (93% strongly agreed). That *Food Sensations* is enjoyable for students was also borne out by results from the Student Survey and Stakeholder Survey. Only 36 of the 87 students who completed the Survey had participated in *Food Sensations*, but of those, 94% said they enjoyed it 'very much' or 'quite a lot'. Almost 90% indicated they would like to learn more about choosing and preparing healthy foods, and 73% said they would 'very much' enjoy taking part in another *Food Sensations* lesson. Of the 11 Stakeholder Survey respondents that had participated in *Food Sensations*, ten were in strong agreement or agreement that their students had enjoyed the session.

*An extremely inclusive and health promoting activity. The students had fun learning - these are always the best experiences. (Teacher, Peel, Provincial)*

*[It] was a fantastic afternoon - information provided was relevant and students were engaged 100% of the time. Thank you for coming and teaching us about healthy eating and cooking. (Teacher, Wheatbelt, Remote)*

*I liked how my class did the cooking class and how we made all different kinds of food. (Year 4 Student, Student Survey)*



### 9.3.3 Impact on Attitudes to Healthy Eating

The Stakeholder Survey and Student Survey respondents were also asked to indicate the degree of influence they felt *Food Sensations* had in improving students' attitudes to healthy eating. Sixty percent of the students said *Food Sensations* had influenced them 'very much' in terms of wanting to eat more healthy food. A further 26% indicated 'quite a lot' and 14% 'somewhat'. All but one of the Stakeholder Survey respondents felt *Food Sensations* had helped improve students' attitudes to nutritious foods. The evaluations by the participating teachers were very positive with 73% in strong agreement and 26% in agreement that *Food Sensations* had helped improve student attitudes towards healthy eating.

*...The students really enjoyed the Food Sensations© session, and I know many of them were planning on buying the ingredients and making the recipes at home. A lot of families in [our town] have had 'festa pasta' over the weekend I think. (Teacher, Wheatbelt, Provincial)*

Since the ultimate goal of attitudinal change is behavioural change, stakeholders and teachers were also asked whether they felt the skills learned in *Food Sensations* would positively contribute to the students' health. Again, 99% of the teachers strongly agreed (72%) or agreed (27%) that it would positively contribute, compared to 88% of stakeholders. Several of the teachers' comments indicated that students were keen to apply their new skills and enthusiasm for cooking healthy homemade meals at home.

*A wonderful outcome is that students are keen to create these meals at home. Well done crew. (Teacher, Kimberley, Very Remote)*

*[After Food Sensations], I even had parents coming to ask me, "Is there any other recipes that we can get our hands on?" (Teacher, School A, Interview, Perth, Metropolitan)*

The following sections present evidence regarding attitudinal change based on the *Food Sensations* student evaluations. All quantitative results reflect only those students who completed both a pre and post evaluation sheet (see Tables 3.3 and 3.4).

#### Student Participant Evaluations

As noted in Chapter 3, separate evaluation instruments were used for primary and secondary students to allow for different emphases in the *Food Sensations* sessions targeted at these age groups. However, there was a great deal of overlap, so where possible the datasets have been combined or the results presented alongside to enable comparison.

To gauge students' attitudes towards various aspects of healthy eating, they were presented with eight statements with response categories of 'yes', 'no' and 'I don't know'. The students' responses were then summed to produce an overall score representing 'positive attitudes', ranging from 0-8. (Note that two negatively worded items were reverse coded.) The non-parametric Wilcoxon signed ranks test for related samples was used to test for changes from pre to post. Table 9.1 presents the mean scores for the primary and secondary students and the results of the Wilcoxon tests. Collectively, students started with relatively positive attitudes (in terms of the eight items), and there were small but statistically significant gains after participating in *Food Sensations*. Table 9.1 further shows that these incremental improvements held true regardless of geolocation or region.

Figure 9.3 displays the percentage of positive responses for each individual item and compares the pre and post results for the primary and secondary students. Here it is evident that there was small improvement for each item. Two notable changes for the secondary students were regarding their perception that 'healthy homemade meals are easy to prepare' (16 percentage point increase) and their intention to 'choose healthy foods when I can' (up by 18 percentage points).



**Table 9.1: Students' positive attitudes to healthy eating, before and after completing a *Food Sensations* session (mean score), by year group, geolocation and RDC region**

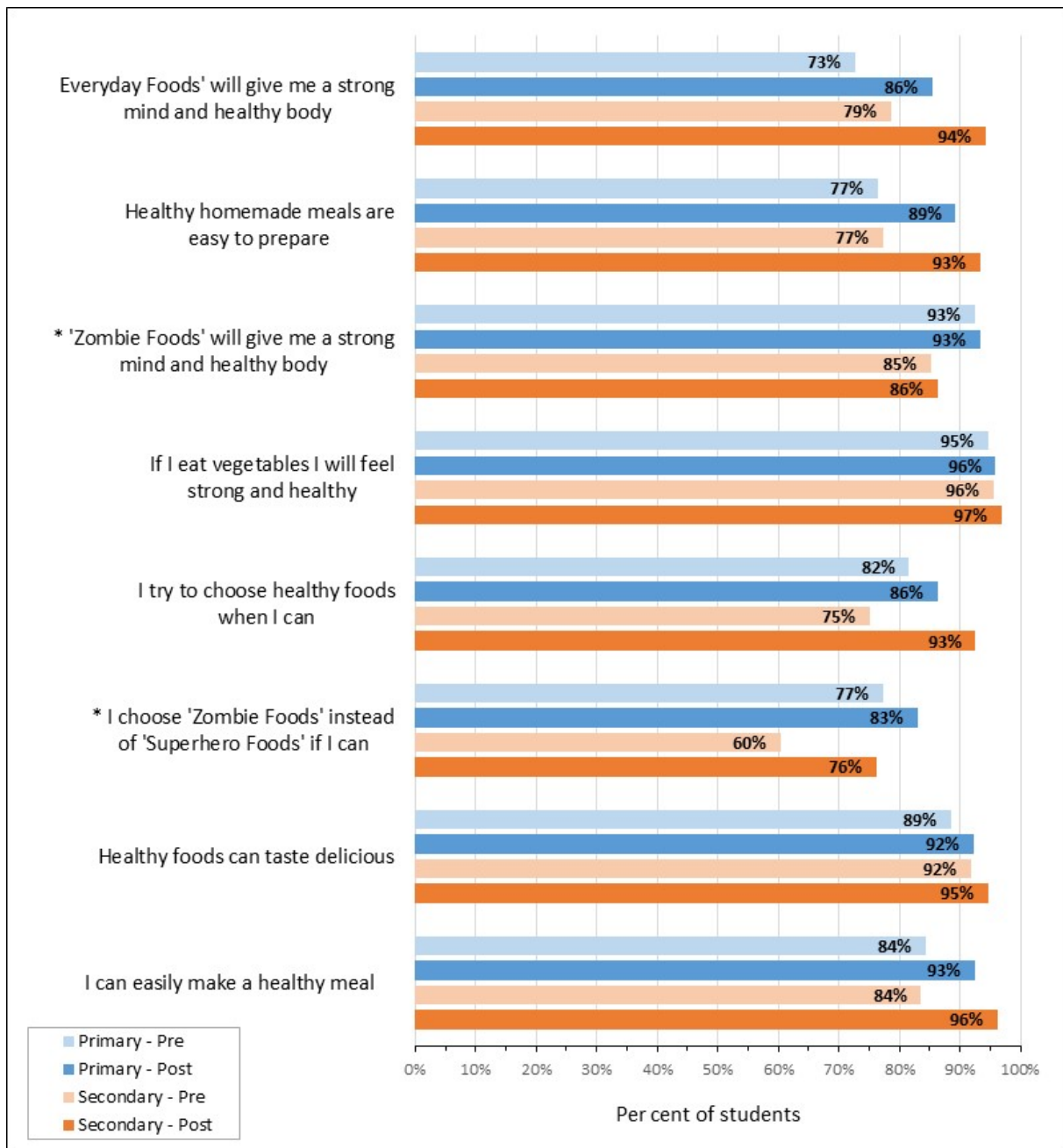
	Total Score <sup>1</sup>			
	Means		Wilcoxon signed ranks test	
	Pre	Post	<i>z</i>	<i>p</i> *
<b>ALL STUDENTS</b>	6.64	7.14	-13.666	*<0.005
<b>Year Group<sup>2</sup></b>				
Primary	6.68	7.18	-13.328	*<0.005
Secondary	6.67	7.20	-3.622	*<0.005
<b>Geolocation</b>				
Metropolitan	6.72	7.18	-9.800	*<0.005
Provincial	6.60	7.11	-9.159	*<0.005
Remote	6.15	6.95	-2.553	* 0.001
Very Remote	6.04	6.38	-1.738	0.082
<b>RDC Region</b>				
Gascoyne	5.90	6.81	-2.607	0.009
Goldfields-Esperance	6.16	6.63	-1.288	0.198
Great Southern	6.78	7.13	-2.623	0.009
Mid West	6.35	7.00	-4.682	*<0.005
Peel	6.35	7.01	-4.211	*<0.005
Perth	6.78	7.22	-9.479	*<0.005
South West	6.85	7.17	-3.253	* 0.001
Wheatbelt	6.56	7.09	-5.758	*<0.005

<sup>1</sup> Range = 0-8

<sup>2</sup> Primary: N = 1,492; Secondary: N = 209

\* Statistically significant. *p* level set at 0.05. *p* level adjusted (Bonferroni correction) to 0.025 for year group, 0.013 for geolocation and 0.006 for RDC region

**Figure 9.3: Per cent of responses reflecting positive attitudes to healthy eating, before and after completing a *Food Sensations* session (primary versus secondary students)**



\* Negatively worded attitude statements were reverse coded. Hence, for asterisked items, the percentages represent those students who answered 'no'. All other items reflect the percentage of 'yes' responses.

Source: *Food Sensations* Student Evaluations 2016 & 2017

## 9.4 Summary / Key Points

### 9.4.1 School Breakfast Program

- Many schools try to capitalise on the opportunity to positively influence students' attitudes to healthy eating through the SBP. This includes engaging SBP students in conversations about healthy eating and nutrition.
- Approximately a third of SBP schools use Foodbank WA resources to promote healthy eating messages at their SBP, such as the Superhero Foods placemats and playing cards.
- The majority of stakeholders believe the SBP has had a positive influence on students' attitudes to healthy eating.
- Students were more likely to rate the SBP as influencing their willingness to try new foods than the adult stakeholder groups.
- There was strong agreement that the SBP makes a positive contribution to the overall health promoting environment of the school.
- The degree to which the SBP is integrated or linked to other school or classroom activities is quite varied. Schools may link the SBP to other health-related initiatives such as Crunch&Sip and the kitchen garden program, or to particular learning areas or curriculum strands.

### 9.4.2 Food Sensations

- Teachers who participated in *Food Sensations* sessions were in strong agreement that the content and resources were suitable to the social context, literacy and numeracy levels and age of their students.
  - Teachers are resoundingly positive in reporting that students found the *Food Sensations* sessions highly engaging and enjoyable.
  - The majority of stakeholder groups agreed that *Food Sensations* positively influenced students' attitudes to healthy eating and contributed to their health.
  - The primary and secondary students' evaluations showed a small but statistically significant increase in positive attitudes to healthy eating after participating in a *Food Sensations* session. This was true for students in all geolocations and RDC regions.
-

# 10. Impact on Children's Knowledge and Skills in Relation to Healthy Eating

EQ4 Have children's knowledge and skills in relation to healthy food and nutrition increased?

## 10.1 Introduction

This chapter presents evidence relating to the impact of the School Breakfast and Nutrition Education Program on children's knowledge and skills in relation to healthy food and nutrition. It draws on data from the annual SBP Coordinator Survey, Stakeholder Survey, Student Survey and Food Sensations evaluations, supplemented by extracts from case study interviews. As in the previous chapter, we examine the influence of the School Breakfast Program and *Food Sensations* separately.

## 10.2 Impact of the School Breakfast Program

### 10.2.1 SBP Coordinators' Perceptions

The SBP Coordinator Survey instrument incorporated five items aimed at eliciting information about the impact of the SBP children's knowledge and awareness of healthy eating, including the Australian dietary guidelines and the effects on the body of healthy ('everyday') foods and discretionary ('sometimes') foods. The latter are concepts covered in *Food Sensations* sessions and via the Superhero Foods resources. A further four survey items sought information about the impact on SBP students' ability to prepare healthy breakfasts, and their awareness of food hygiene, kitchen safety and safe food handling practices.

The results for 2015-2017, as presented in Figure 10.1, suggest that school breakfast programs have the biggest impact in terms of raising students' awareness of healthy eating and teaching them about healthy breakfast choices.

*A lot more students are aware that eating healthy is better for you. They feel better about themselves and others. (SBP Coordinator, Wheatbelt, Provincial)*

Given the social emphasis placed on SBPs, it is not surprising that they are less impactful in terms of developing students' understanding of specific concepts relating to healthy foods, such as 'sometimes' or discretionary foods versus 'everyday' nutritious foods.

The other area where relatively strong impact is evident is in terms of developing students' knowledge of kitchen safety, and food handling and hygiene practices. This is particularly important given that, as we have seen, many schools actively engage their students in preparing and/or serving food in their breakfast programs.

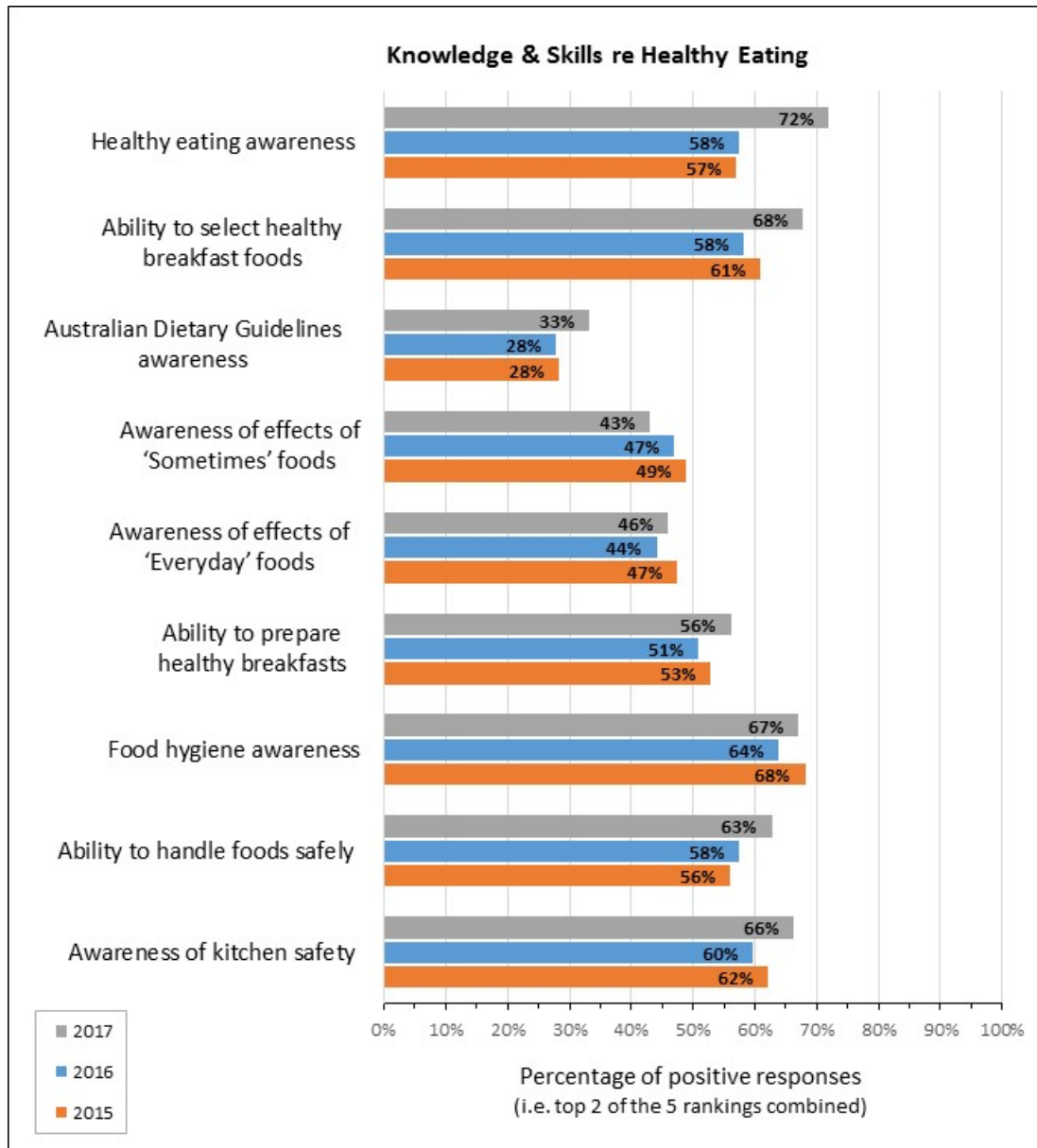
*After attending Breakfast Club for a while the students know about hygiene and safety: they know to wash their hands before serving, they know that they should only touch the handles of cutlery or serving spoons (otherwise they must wash them again); they must not handle sharp knives unless allowed to do so, they must use trays, plates and tongs to handle food, etc. (SBP Coordinator, South West, Provincial)*

The following extract from an interview with the Principal of case study School E (very remote) provides some insight to the incidental learning that takes place in breakfast programs:

*I think there's a lot of things going on there [at breakfast club], and kids wouldn't necessarily recognise that they're learning cooperation skills, and they're learning about hygiene, they're all sort of incidental to the whole process. But because there's that repetition theme there, that as*

soon as anybody rocks up, “Oh, have you washed your hands?” ... You know, “Go off and wash hands”, and that just becomes a routine, that you wash your hands before you do anything with the food. ... That’s been really pushed... Local people haven’t necessarily had that [health education]. So if we can work on that, and develop that, then we can see the health pay offs. (Principal, School E, Kimberley, Very Remote)

**Figure 10.1: Comparison of SBP Coordinators’ ratings of the positive impact of the SBP on students’ knowledge and skills re healthy eating, 2015-2017**



Source: SBP Coordinator Survey 2015, 2016 & 2017

In the example below, the SBP Coordinator at a provincial school describes how nutritional knowledge and messages about healthy eating are reinforced through the breakfast program and across the whole school:

*Students that come to the SBP know that having sugar on cereal is not so healthy. Students that come to the SBP hear the staff talking about healthy eating, healthy quantities, sometimes food, etc. At recess the students sometimes talk to one another about the healthiness of one another's recess, and those who come to school breakfast share what they have learned. Students ask me, because they understand that because I run the breakfast I understand about healthy eating. In this sense, the message is spread, and certain staff members are identified by the students as people that know about healthy eating. Students have also learned that when they don't have breakfast or recess they don't feel so calm, content, ready to work, and ready to participate in fitness. Teachers will often ask, 'Did you have breakfast?' when a child is discontent or even disruptive. Again, the school as a whole understands that healthy food is important. (SBP Coordinator, South West, Provincial)*

## 10.2.2 Comparison of Perspectives of Stakeholder Groups

In order to gain a range of perspectives, similar items relating to impact of the SBP on students' knowledge and skills in relation to healthy eating were included in the Stakeholder Survey and Student Survey. Those items that directly correspond are presented in Figure 10.2. Once again it is very evident that the students are more 'generous' in attributing impact of SBPs on their knowledge and skills. While this is likely to be an artefact of bias (as described in Section 3.7) in that the more positively oriented students elected to participate in the evaluation, it is also plausible that students are gaining very important health messages through their participation in the program that they don't receive in the home environment. Indeed, some SBP Coordinators commented that their students were now well aware of the benefits of healthy eating but that this was not necessarily taken up by parents.

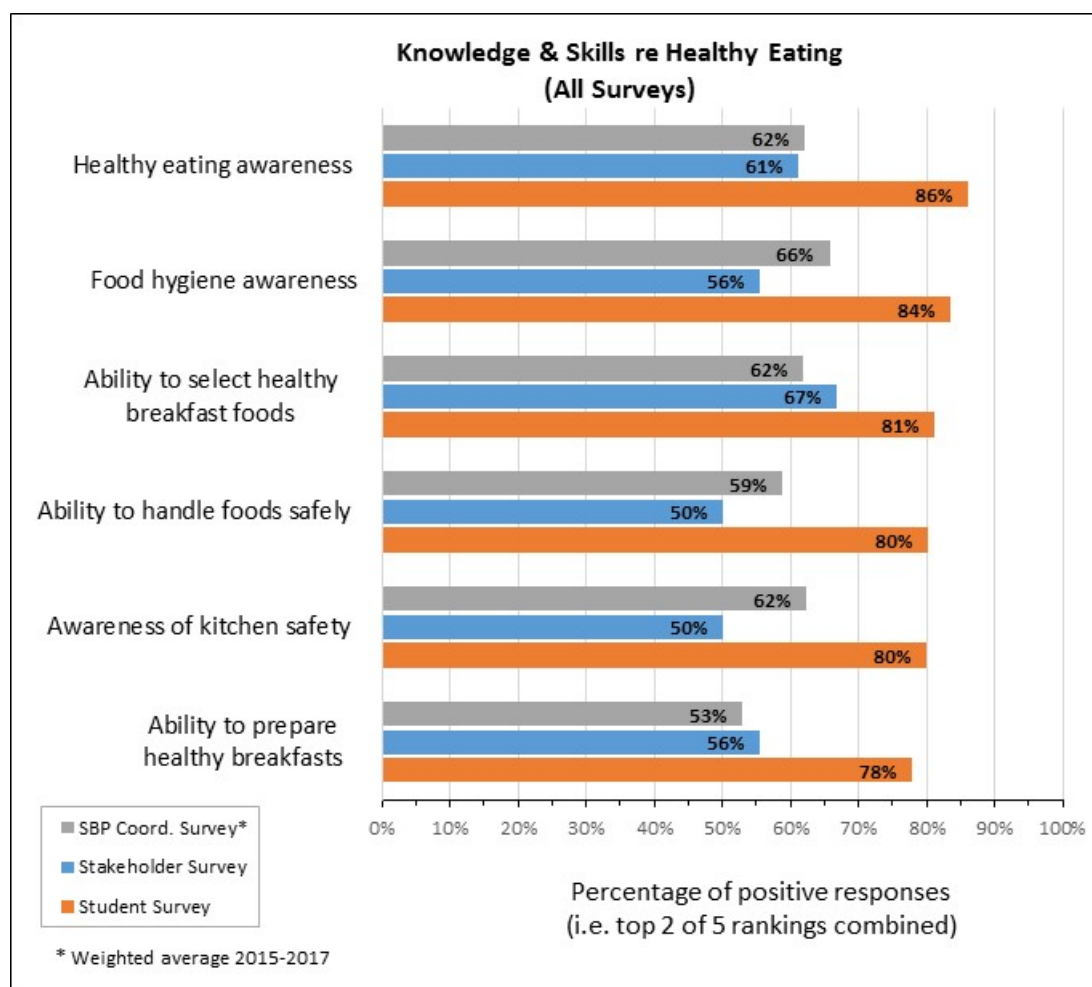
*I like brecfaet clup it techers me new things of hethe eating and more. I have got to now more studens and stafe members. I like helping [the SBP Coordinator] with making food like tost and more [sic]. (Year 5 Student, Student Survey)*

## 10.3 Impact of Food Sensations

### 10.3.1 Perceptions of Stakeholder Groups

Insights to the impact of *Food Sensations* on students' knowledge and skills were sought via the Stakeholder Survey, Student Survey, *Food Sensations* teacher and student evaluations, and case study interviews. Table 10.1 compares the quantitative ratings of three of the stakeholder groups given in response to four items relating to the knowledge and skills imparted via *Food Sensations* sessions. Relative to the teachers and other stakeholders, the students were a little less optimistic about the impact of *Food Sensations* on their knowledge of healthy foods, ability to choose healthy foods, and skills to prepare healthy foods and handle food safely. The reverse was true for the School Breakfast Program. This perhaps reflects the ongoing influence of SBPs versus the short-term impact of a single *Food Sensations* session.

**Figure 10.2: Comparison of positive ratings of impact of the SBP on children's knowledge and skills regarding healthy eating**



Sources: SBP Coordinator Survey (2015-17), Stakeholder Survey and Student Survey

**Table 10.1: Comparison of positive ratings of the impact of Food Sensations on children's knowledge and skills regarding healthy eating**

<i>Food Sensations:</i>	Student Survey <sup>1</sup> %	Stakeholder Survey <sup>2</sup> %	FS Teacher Evaluations <sup>3</sup> %
Improved knowledge about healthy foods	88	100	99
Showed students how to choose healthy foods	82	100	100
Taught skills to prepare healthy foods	88	91	99
Showed students how to handle food safely	85	82	99

<sup>1</sup> n=35. Top 2 categories of 5-point Likert scale

<sup>2</sup> n=11. Top 2 categories of 5-point Likert scale combined

<sup>3</sup> n=178. Top 2 categories combined. Based on 4-point Likert scale, so results may be inflated in comparison to Student and Stakeholder Survey.



### 10.3.2 Food Sensations Student Evaluations

This section reports on the results of the *Food Sensations* student evaluations that were completed by students before and after participating in a session. There is an important limitation that first must be stressed in relation to the student evaluation. That is, the primary and secondary student instruments were designed to be used for all sessions rather than targeted to specific nutrition topics or lesson plans. At the time, this was deemed necessary to reduce the administrative burden placed on the *Food Sensations* teams since they mail the paper-based 'pre' evaluations to schools ahead of time and also distribute and collect the post evaluations. The nutrition topic delivered during a *Food Sensations* session is selected from the suite of *Food Sensations* lesson plans (see Table 1.2) according to the particular age group and social context of the school, and prior participation in *Food Sensations*. Not all food and nutrition topics are taught in each lesson, hence the results may reflect students' unfamiliarity with specific knowledge or concepts, such as how to interpret a food label. For the sake of brevity, only selected results from the student evaluations are presented in order to highlight particular areas of knowledge.

#### Overall Student Knowledge

For both the primary and secondary students, total 'knowledge scores' were calculated by summing all the correctly answered or positively scored items. The mean total scores for both groups are presented in Table 10.2. Note that the ranges for the total scores were 34 and 35, respectively, for the primary and secondary instruments. The relatively small average gains from pre to post (i.e. primary: +2.7, secondary: +1.6) were statistically significant, suggesting that these improvements can be attributed to the *Food Sensations* intervention.

**Table 10.2: Pre and post mean total scores for knowledge of healthy food and nutrition, primary and secondary students**

	Total Score <sup>1</sup>			
	Means		Wilcoxon signed ranks test	
	Pre	Post	z	P*
Primary <sup>2</sup>	25.6	28.3	-23.708	*<0.005
Secondary <sup>2</sup>	25.5	27.1	-6.305	*<0.005

<sup>1</sup> Primary: Range = 0 - 34; Secondary: Range = 0 – 35

<sup>2</sup> Primary: n= 1,492; Secondary: n = 222

Since the primary and secondary evaluation instruments had several items in common, these were combined and further statistical comparisons were conducted. Note that the maximum possible score for these common items was 9. Table 10.3 presents the mean scores for each of the comparison groups and the results of the Wilcoxon test for related samples to determine whether the observed improvements for each subgroup were statistically significant. Bonferroni corrections for multiple comparisons were applied which set more conservative significance levels according to the number of groups involved. It is notable that almost all the observed improvements from pre- to post-test were statistically significant. The largest average improvements in students' knowledge were in very remote schools, and the Goldfields-Esperance region.

Comparisons based on the students' gain scores (i.e. the change from pre to post) were also conducted to examine any potential effect of year group, geolocation or region on students' knowledge. A significant effect was only found for year group, reflected in the larger knowledge gains made by primary students as

compared to the secondary students. This is unsurprising, however, given the younger age of the primary students and likelihood they had less prior exposure to the nutrition concepts covered in the *Food Sensations* sessions.

**Table 10.3: Students' nutritional knowledge before and after completing a *Food Sensations* session (mean score), by year group, geolocation and RDC region**

	Total Score <sup>1</sup>			
	Means		Wilcoxon signed ranks test	
	Pre	Post	z	P*
<b>ALL STUDENTS</b>	5.79	6.73	-20.695	*<0.005
<b>Year Group</b>				
Primary	5.71	6.76	-20.941	*<0.005
Secondary	6.41	6.64	-1.915	0.056
<b>Geolocation</b>				
Metropolitan	5.89	6.80	-15.301	*<0.005
Provincial	5.74	6.71	-13.095	*<0.005
Remote	5.49	6.32	-3.433	* 0.001
Very Remote	4.67	6.42	-3.732	*<0.005
<b>RDC Region</b>				
Gascoyne	5.17	6.21	-3.450	* 0.001
Goldfields-Esperance	4.75	6.50	-3.386	* 0.001
Great Southern	5.75	6.53	-4.483	*<0.005
Mid West	5.45	6.56	-6.736	*<0.005
Peel	5.62	6.65	-6.359	*<0.005
Perth	5.91	6.82	-14.987	*<0.005
South West	5.93	6.89	-5.021	*<0.005
Wheatbelt	5.87	6.73	-7.340	*<0.005

<sup>1</sup> Minimum score = 0, Maximum score = 9

\* Statistically significant. *p* level adjusted (Bonferroni correction) to 0.025 for year group, 0.013 for geolocation and 0.006 for RDC region

The following sections present results relating to specific nutrition knowledge or concepts. Where possible the primary and secondary results are presented together.

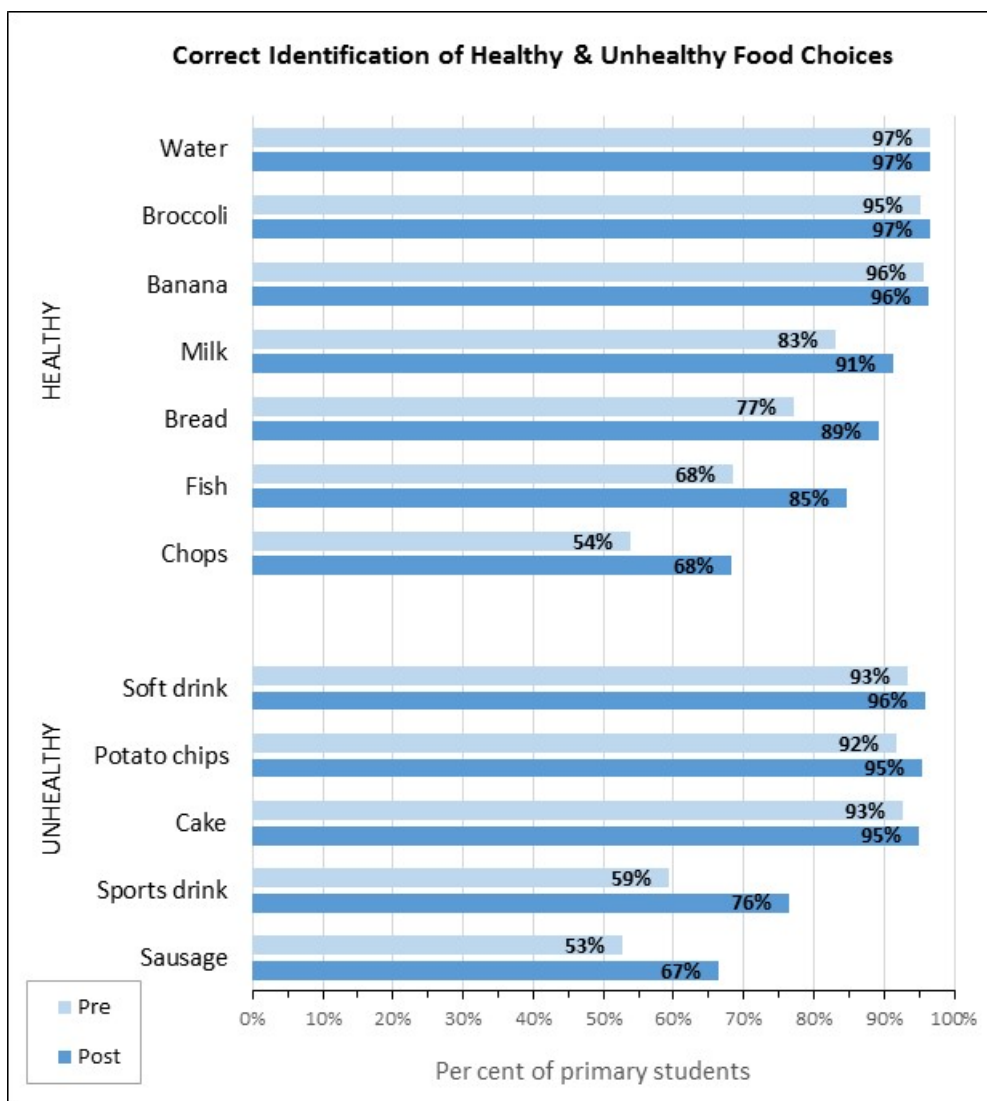
## Healthy Food Choices

### Primary

Figure 10.3 presents the results of an item aimed at determining the primary students' ability to identify healthy food choices. Twelve food items were listed (with accompanying pictures), and students were asked to tick the option that indicated what their body could look like if they had that food very day. Three options were provided: one showed a picture of a boy and girl looking fit and healthy, another showed a boy and girl looking listless and unhealthy, and a third option showed a question mark with 'don't know'. There were improvements from pre to post in the proportions of students able to correctly identify foods as healthy or unhealthy. Students were easily able to identify water, broccoli, and banana as healthy food choices, and soft drink, potato chips and cake as unhealthy, so these show very small gains. Other items were more difficult for students to identify (e.g. fish, sports drink, sausage) and these show greater gains from pre to post.

Total scores were calculated reflecting the number of food items correctly identified as healthy or unhealthy by the students (range 0-12). Wilcoxon signed-rank testing of the total scores showed a significant increase in correct answers from pre- to post-test (Pre mean = 9.4, Post mean = 10.4;  $z = -19.004$ ,  $p < 0.005$ ).

**Figure 10.3: Foods correctly identified by primary students as healthy or unhealthy food choices (pre vs post)**

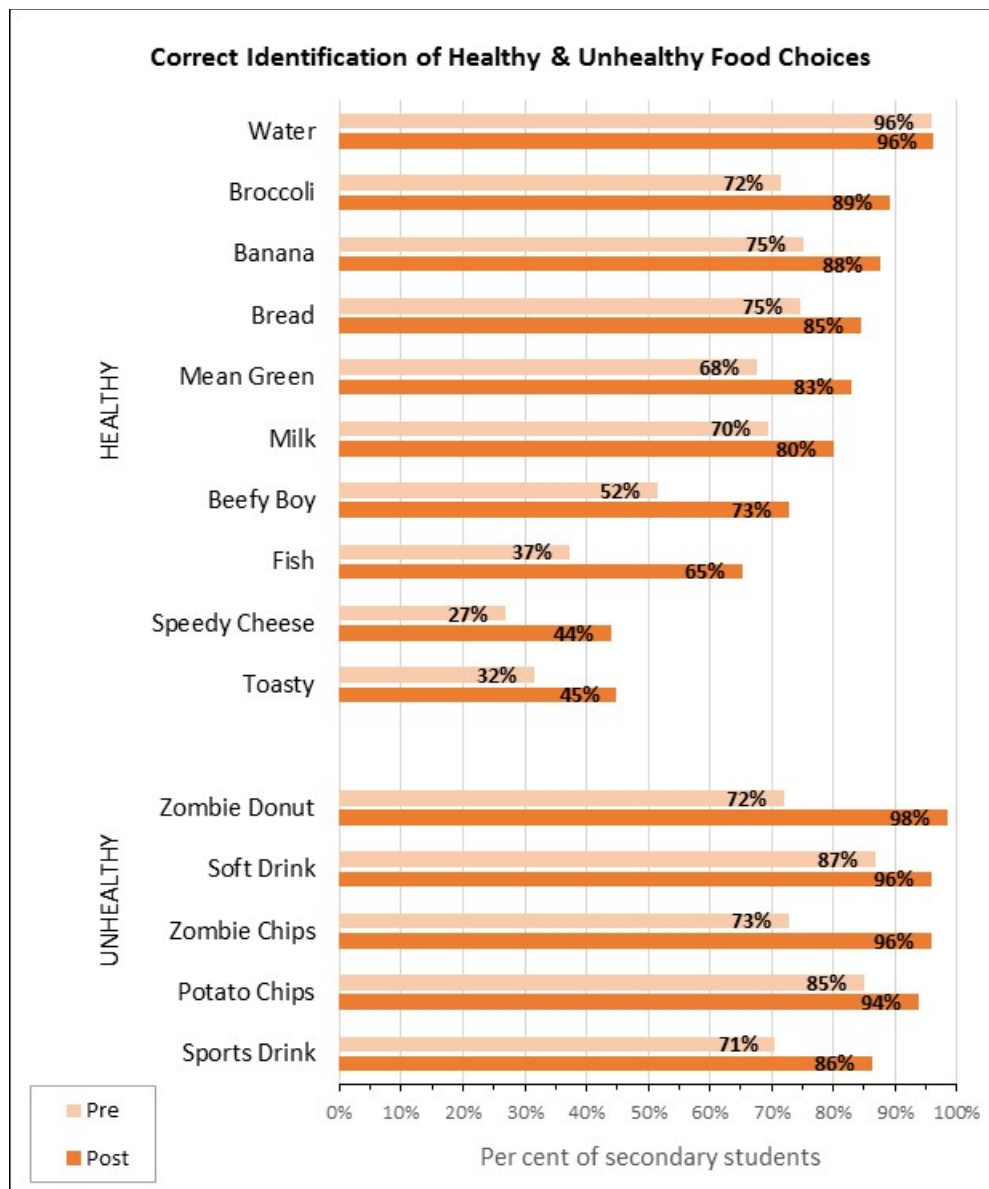


Source: *Food Sensations Student Evaluations 2016 & 2017*

## Secondary

Secondary students were presented with 15 food and drink items (words and pictures), including some Superhero Foods, and asked to tick whether they can have the food 'everyday' or 'sometimes' to be healthy. Figure 10.4 shows that more students were able to correctly identify healthy versus unhealthy food items after the Food Sensations session. Like the primary students, the secondary students were less able to identify fish as a healthy food choice. Comparison of the secondary students' total scores (range 0-15) using the Wilcoxon test for related samples showed statistically significant improvement from pre to post test (i.e. Pre mean =9.8, Post mean=11.4;  $z=-8.484$ ,  $p<0.005$ ).

**Figure 10.4: Foods correctly identified by secondary students as healthy or unhealthy food choices (pre vs post)**

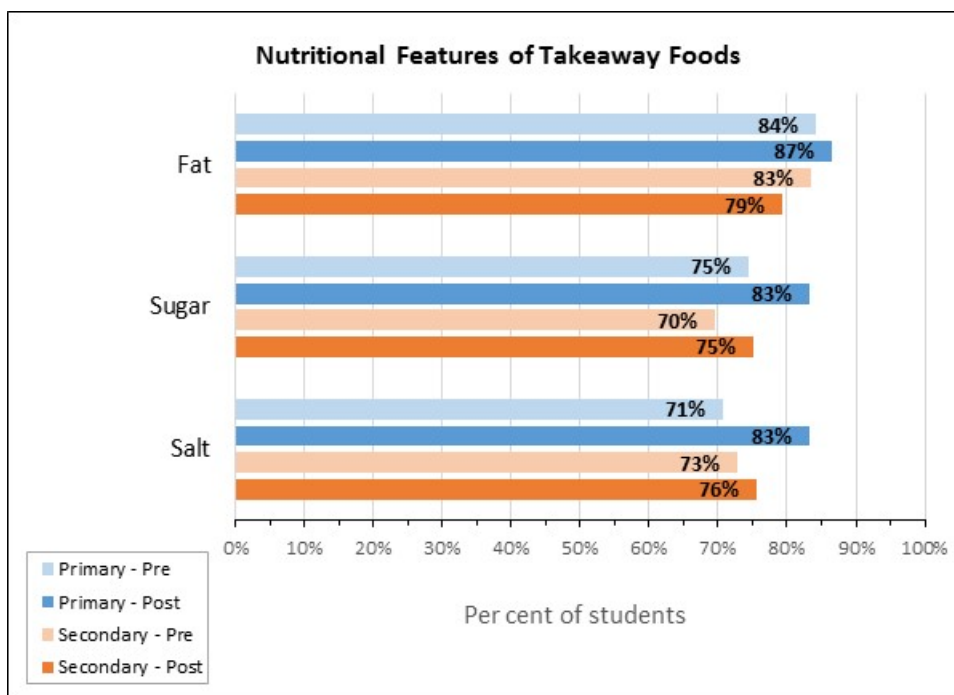


Source: *Food Sensations Student Evaluations 2016 & 2017*

## Nutritional Features of Takeaway Foods

Both primary and secondary students were asked to indicate which nutrients takeaway foods are typically high in. The choices were salt, sugar, vitamins, minerals, fat, and fibre. Figure 10.5 shows that both groups were more likely to correctly identify sugar and salt after the *Food Sensations* session, but interestingly slightly fewer secondary students identified takeaway foods as being generally high in fat. Overall, significantly more students were able to correctly identify all three characteristics at post-test (1,199 or 82% of sample) than at pre-test (986 students or 68% of sample) (McNemar test:  $\chi^2 = 125.819$ ,  $n = 1,455$ ,  $p < 0.005$ ).

**Figure 10.5: Per cent of correct responses reflecting knowledge of the nutritional features of takeaway foods - before and after completing a *Food Sensations* session (primary vs secondary)**



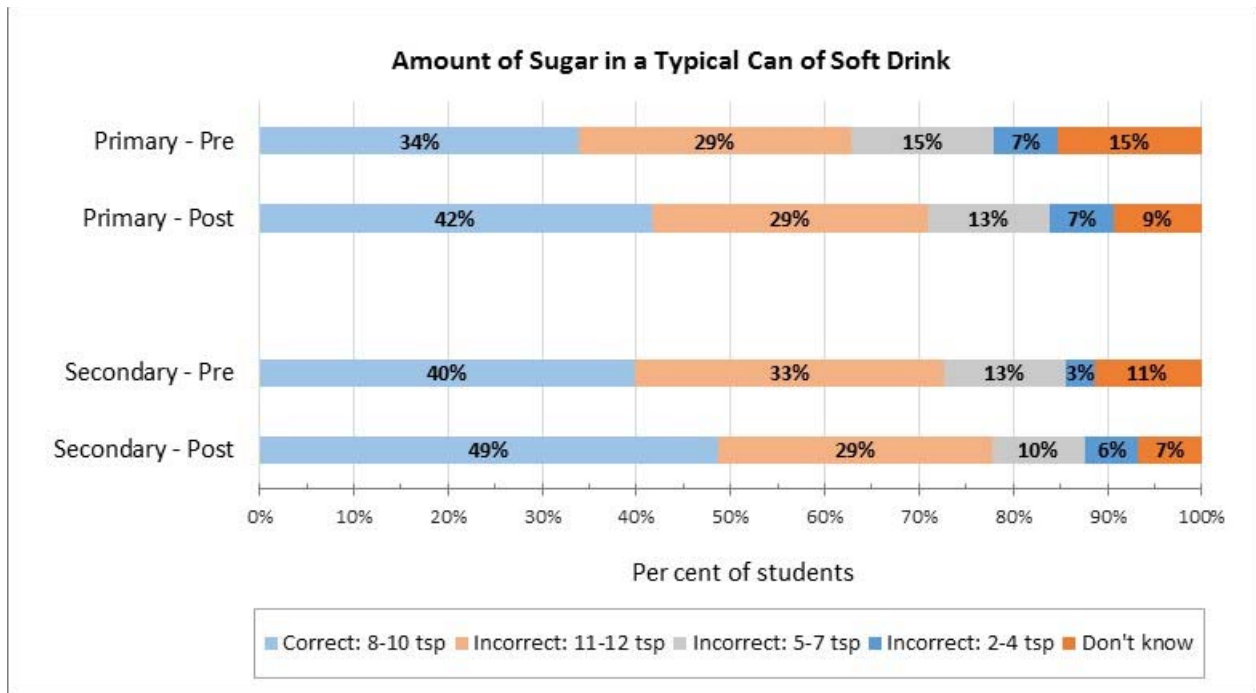
Source: *Food Sensations* Student Evaluations 2016 & 2017

## Sugar in Drinks

Students were asked to indicate how many teaspoons of sugar are in a typical can of soft drink, choosing from 2-4, 5-7, 8-10, 11-12 or don't know. As shown in Figure 10.6, the primary and secondary students show improvements from pre to post, and reductions in the number of students who responded 'don't know'. This improvement was statistically significant (McNemar test:  $\chi^2 = 76.066$ ,  $n = 1,590$ ,  $p < 0.005$ ). It is notable that students were more likely to overestimate the amount of sugar in drinks than to underestimate (i.e. select 11-12 teaspoons rather than 2-4 or 5-7 teaspoons).

*I liked the activity with the spoons showing sugar amount, etc. The parents thought it was great too. Students had so much fun cooking and loved the food. (Teacher, Perth, Metropolitan)*

**Figure 10.6: Per cent of responses reflecting knowledge of the amount of sugar in a typical can of soft drink - before and after completing a *Food Sensations* session (primary vs secondary)**



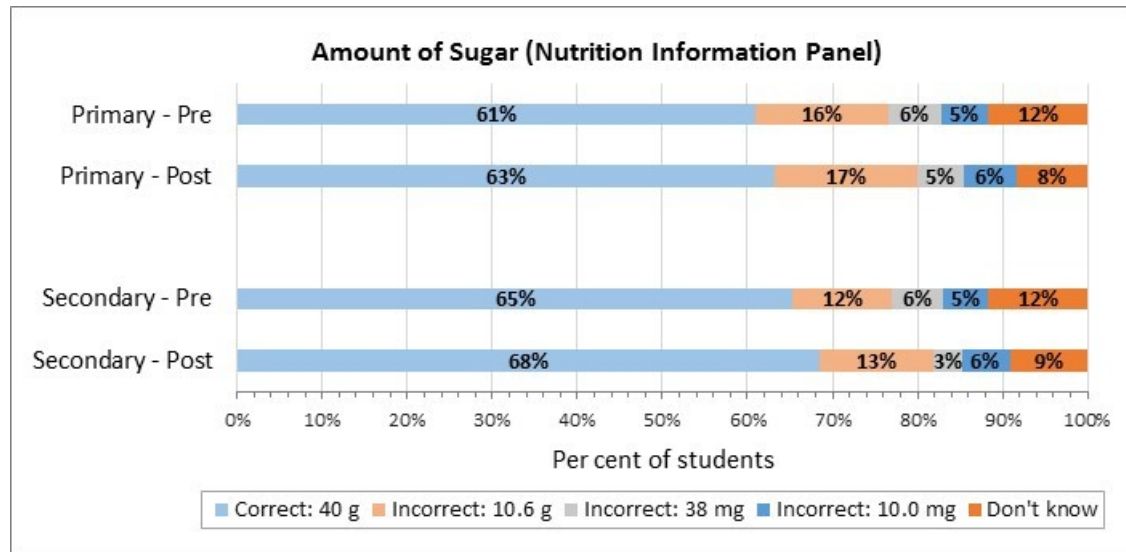
Source: *Food Sensations* Student Evaluations 2016 & 2017

## Food Labels

Results of the student evaluations show there were also improvements in the students' food label reading skills after completing a *Food Sensations* session. Both primary and secondary students were presented with a soft drink Nutrition Information Panel (NIP), and asked two questions in order to gauge their understanding and interpretation of the panel. One question related to the amount of sugar, the other to the number of servings in the can – based on the NIP provided. The results for primary and secondary students are presented below.

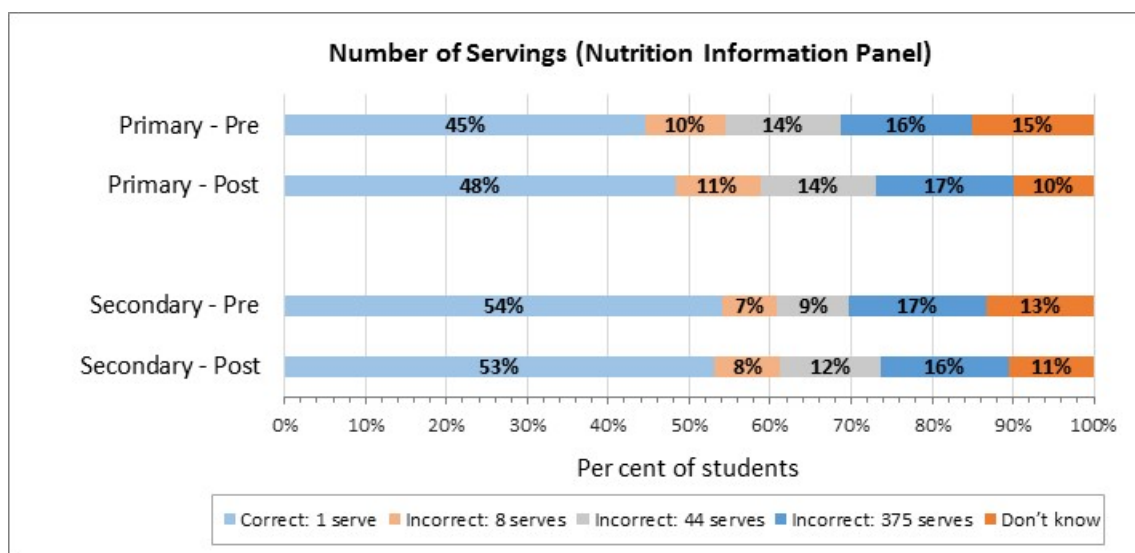
Figure 10.7 shows that there were slight improvements from pre to post test for both groups of students in terms of their ability to correctly interpret the amount of sugar in a soft drink can using the NIP. Students were less successful at identifying the correct number of servings, however. Figure 10.8 shows a slight decline for the secondary students. As noted at the beginning of section 9.3.2, the less substantial gains made with these items may be because the *Food Sensations* lessons or topics covered with secondary students did not include food label reading.

**Figure 10.7: Interpretation of a nutrition information panel -- amount of sugar in a soft drink can (primary vs secondary/pre vs post)**



Source: *Food Sensations Student Evaluations 2016 & 2017*

**Figure 10.8: Interpretation of a nutrition information panel - number of servings in a soft drink can (primary vs secondary/pre vs post)**



Source: *Food Sensations Student Evaluations 2016 & 2017*

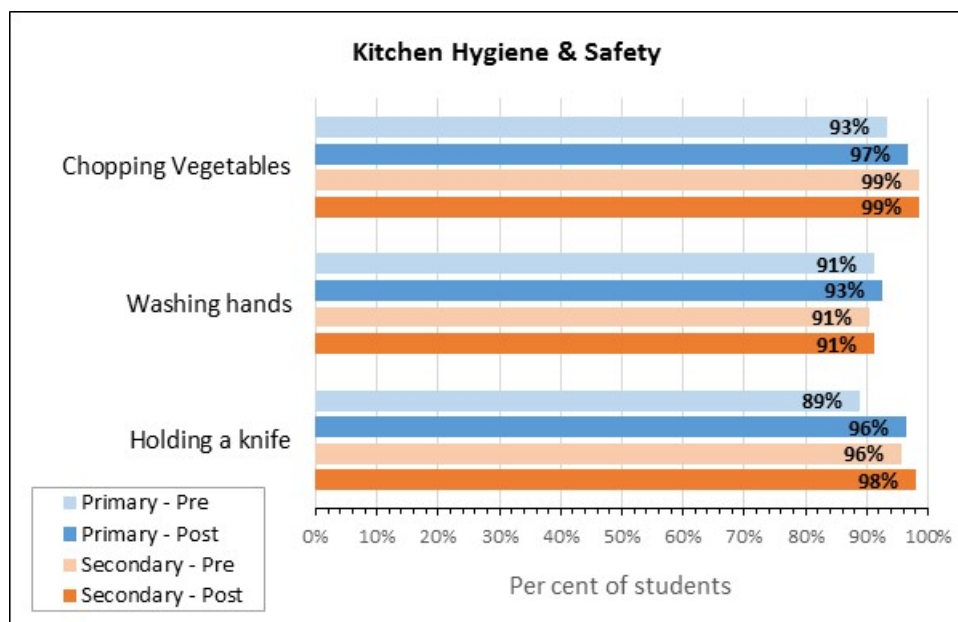


## Kitchen Safety and Hygiene

To measure students' knowledge of kitchen safety and food hygiene, three items were presented that required them to select the image conveying the correct way to 'carry a knife', 'wash hands', and 'chop vegetables'. Figure 10.9 shows that most students were able to identify the correct methods at pre-test, so only small increases are evident at post-test. The biggest improvement is evident for primary students in relation to how to carry a kitchen knife safely.

*I found the session very student friendly and I liked the way safety was explained before we started. I also liked the way they were shown to wash their hands and were reminded that if they touched their clothes or hair etc they would need to wash their hands again. (Teacher, Peel, Provincial)*

**Figure 10.9: Per cent of correct responses reflecting knowledge of kitchen safety – pre and post a *Food Sensations* session (primary vs secondary)**



Source: *Food Sensations* Student Evaluations 2016 & 2017

### 10.3.3 Qualitative Evidence of Impact on Students' Knowledge and Skills Regarding Healthy Eating

As shown in Chapter 8, many of the teachers that completed *Food Sensations* evaluations provided additional written comments in which they highlighted the positive impact the sessions had on their students. A strong theme was that students were enthused by their cooking experiences and keen to try out their new skills at home. The overwhelmingly positive response to *Food Sensations* in schools is aptly depicted by one teacher who wrote:

*Just all round fantastic - made me realise some major gaps in my students' knowledge i.e. many didn't understand the differences between fruits and vegetables - yikes! So, thanks for helping me to discover that and for making my kids so excited about cooking and healthy food. (Goldfields-Esperance, Very Remote)*

*This program provides so many benefits that it should be the next headline news report in tomorrow's paper! Not only does it teach children what healthy food looks like, it also teaches children the*

*positives of eating healthily. It is all done in a fun way and I cannot say how much I enjoyed it - in such a small amount of space. Well done and thank you. (Teacher, Perth, Metropolitan)*

### 10.3.4 Impact on Teachers' Knowledge and Classroom Practice

There is good evidence that *Food Sensations* does help improve students' knowledge and skills regarding healthy eating. However, as it is only a short-term intervention and not available to schools every year, it is also important to consider the impact on classroom teachers who have ongoing responsibility for students' learning about food, nutrition and wellbeing as part of the Health and Physical Education (HPE) curriculum and other learning areas and curriculum strands. The teacher evaluation therefore included four items related to the relevance of *Food Sensations* content to the HPE curriculum, improvement in teachers' pedagogical content knowledge, motivation to include more nutrition education in their teaching program, and need for further professional learning. Almost all the teachers ( $\geq 98\%$ ) agreed or strongly agreed with the items, except in relation to professional learning. For this item, 22% of the sample disagreed that the *Food Sensations* lesson had highlighted their own need for more professional learning in nutrition education and 2% strongly disagreed. All of these teachers' comments were very positive, however, so their disagreement suggests they felt they already had sufficient nutrition education knowledge and expertise.

*Congratulations to the Foodbank team and their staff for curriculum-linking nutrition activities, especially the cooking component. Our students also developed a sense/understanding of working in teams and co-operating with others. (Teacher, Wheatbelt, Provincial)*

*I will be looking at the website for lesson ideas regarding healthy eating. Thanks for a fun day! (Teacher, Mid West, Provincial)*

Teacher were also asked whether they intend to use the *Food Sensations* support materials to deliver curriculum in their own classroom. More than 60% strongly agreed that they would use the materials. This was true for teachers across all geolocations and regions.

*We really enjoyed the cooking lesson and trying new foods. The recipe books will help our in-class cooking sessions. (Teacher, Mid West, Provincial)*

## 10.4 Summary / Key Points

### 10.4.1 School Breakfast Program

- SBP Coordinators, students and stakeholders agree that the SBP has a strong positive impact on students' awareness of healthy eating and ability to make healthy breakfast choices.
- Strong impact was also indicated in relation to students' knowledge of kitchen safety, food handling and hygiene practices. This is of some significance given that many SBP schools involve students to some extent in preparing and/or serving breakfasts.
- Students were considerably more positive about the influence of the SBP on their knowledge and skills in relation to healthy eating than the adult stakeholder groups.

### 10.4.2 Food Sensations

- There was strong agreement among survey respondents (stakeholders and students) that *Food Sensations* has a positive impact on students' knowledge and skills in relation to healthy eating.
- Evaluations of students' overall knowledge of healthy food and nutrition completed before and after participating in a *Food Sensations* session showed small but statistically significant gains for both primary and secondary students.

- Small improvements in students' knowledge were evident for each of the areas covered by the evaluation, including the ability to identify healthy food choices, knowledge of the nutritional features of takeaway foods, knowledge of the amount of sugar in soft drinks, ability to interpret food labels, and knowledge of kitchen safety and hygiene practices.
  - Comments from participating teachers affirm the positive influence of *Food Sensations* on students' knowledge. Many teachers stated that their students were keen to try out the skills and recipes learned in *Food Sensations* at home.
  - Almost all the participating teachers agreed that *Food Sensations* had helped them meet some of their curriculum/learning area requirements, improved their knowledge of how to teach children about choosing healthy food, and motivated them to include more nutrition education in their teaching program.
  - More than 60% of the teachers also acknowledged that participation in *Food Sensations* had highlighted their own need for more professional learning in nutrition education.
-

# 11. Sustainability and Improvement of the SBNEP

- EQ5 Has there been any impact on the longer term sustainability of the program that better meets the needs of schools?
- EQ7 Is the program good Value for Money?
- EQ11 How can the operation of the program be improved in the future? (lessons learned)
- EQ12 What performance monitoring and continuous quality improvement arrangements]

## 11.1 Introduction

In this final results chapter we present evidence regarding the sustainability of the SBNEP and areas for improvement identified by stakeholders, and consider the current performance monitoring and continuous quality improvement arrangements that are currently in place. We end the chapter by considering the cumulative evidence in relation to value for money. The data sources include the SBP Coordinator Survey, Stakeholder Survey, Student Survey, case study interviews, Foodbank WA SBP registration records and interviews with Foodbank WA staff.

## 11.2 Definition of Sustainability

In the context of program evaluation, the meaning or definition of the term ‘sustainability’ can differ among stakeholder groups [179] or vary according to the stage of development of the program in question. Often the definition encompasses the expectation that program goals, outcomes, and impact will continue to be achievable after initial funding has ceased. In other words, that alternative ways of funding and resourcing the program will be secured. We have *not* applied that definition in investigating the sustainability of the SBNEP since there is no explicit or implicit expectation that funding by the three state Government agencies should cease after a fixed period of time. Hence, we have assumed the financial base for the SBNEP is relatively stable and have approached sustainability from the perspective of whether the SBNEP can maintain its activities, intended outcomes and impact over time. Since schools and communities are not static, sustainability of the SBNEP will depend in part on its ability to change and adapt in order to meet their needs.

## 11.3 Sustainability of the SBP

In terms of the continuity or maturity of the School Breakfast Program, a relatively simple measure to consider is the length of time that schools have been running their SBP. Based on the 2017 SBP registration data maintained by Foodbank WA, it was found that the 428 participating schools had been registered with the program for an average of 8.26 years (maximum possible period is 17 years). Since schools may come and go from the program depending on community needs, the longest *continuous* period that schools had been registered with the SBP was also calculated. The average *continuous* length of involvement in the SBP was 7.44 years.

Table 11.1 shows the distribution of the 2017 SBP schools according to both the total cumulative period of involvement and longest continuous period of involvement in the program. Here we see that 40% of schools have been involved with the SBP for more than a decade, and almost a third of schools have been continuously involved for that period. Hence, this provides some assurance that schools can sustain the SBP over time in response to community needs.

**Table 11.1: Distribution of schools according to total cumulative period and longest continuous period of participation in the School Breakfast Program (2017)**

Time	Registered SBP Schools 2017	
	Total cumulative period	Longest continuous period
	%	%
1-2 years	10	11
3-5 years	18	21
6-9 years	32	35
10-13 years	29	27
14-17 years	11	5

Source: Foodbank WA SBP registration data for 2017.

The relative longevity of the SBP in schools is also supported by the feedback received via the surveys and case studies. For each cohort of the SBP Coordinator Survey, at least 85% of schools indicated the SBP was sustainable, and only 1-2% (or 3-4 schools per cohort) stated it was unsustainable. The remaining 12-13% of schools indicated they were unsure about the sustainability of their SBP. Interestingly, higher proportions of the remote and very remote schools (92-95%) felt that the SBP was sustainable. As the Coordinator at one very remote school commented:

*Our isolation requires us to go to lengths other schools do not need to do to make it happen. No real short cuts. (Goldfields-Esperance, Very Remote)*

The potential threats to sustainability identified by respondents were consistent with the factors affecting implementation and ongoing operations presented in Chapter 4. That is, staffing levels and access to volunteers, time constraints related to staff employment contracts (i.e. part-time SBP Coordinators), and financial and budgetary issues. Many schools simply pointed out that the SBP would be sustainable as long as state Government funding for the supply and distribution of food products was continued.

Further insights about sustainability were sought from schools with regard to the strategies or measures they use to ensure the ongoing operation of their SBP. A few schools noted that there were no sophisticated strategies in use – pointing out that ‘we keep it simple’ or ‘it just happens’. The strategies described in the remaining responses were, as we might expect, aimed at addressing those issues already identified as potentially problematic in running the SBP. For example, in order to ensure adequate staffing and access to volunteers, schools developed rosters, timetabled staff to cover the SBP Coordinator role, or created one or more paid positions to run the SBP. Measures were put in place to recruit, retain and value volunteers, and students were enlisted to help run the SBP thereby reducing the workload of staff.

In relation to funding, schools spoke of giving the SBP a high priority and factoring it into strategic planning to ensure it was adequately funded and resourced. This extended to the adoption of a whole school approach whereby the SBP is part of the school’s ethos and ‘what we do’. Schools also sought to establish partnerships with local business and community groups and actively promoted the SBP to their students and families

*The importance of offering breakfast takes high priority at this school and is embedded in its culture, ensuring sustainability. (Wheatbelt, Provincial)*

*The School Breakfast Program has been embedded into the Student Services Strategic Plan as an ongoing strategy to provide students at risk with support. (Great Southern, Provincial)*

on an ongoing basis, making sure the community understood its importance. Examples of comments regarding sustainability measures are provided in Table 11.2.

**Table 11.2: Strategies or measures used by schools to ensure the sustainability of the School Breakfast program**

Theme	Representative Comments
<b>Whole school approach / Part of strategic plan</b>	<i>It is part of school long term planning and has a budget allocated for staff and additional foods and fridges or freezer. (South West, Provincial)</i> <i>Commitment by whole school, inclusion in school operational plan. (SBP Coordinator, Kimberley, Very Remote)</i>
<b>Promotion to the school community</b>	<i>We always promote our Breakfast program to our students and their families so they know that their child can come to school with having the support from our staff to ensure their child can get something to eat without feeling shame. (SBP Coordinator, Perth, Metropolitan)</i>
<b>Managing volunteers</b>	<i>Volunteers are supported and encouraged. (SBP Coordinator, Goldfields-Esperance, Provincial)</i>
<b>Enlisting student support</b>	<i>In having the students play a large part in the running of Breakfast Club we are ensuring that it is a sustainable program, because it can continue to operate when regular staff are away and relief staff come in: the students know what to do and where everything is. (SBP Coordinator, South West, Provincial)</i>
<b>Community partnerships</b>	<i>We have recently partnered with Rotary to build an outdoor kitchen so we can prepare healthier food in the outdoors for everyone to enjoy. (SBP Coordinator, Peel, Provincial)</i>
<b>Ensuring adequate facilities</b>	<i>The school always ensures that there is a functioning room with safe up-to-date equipment always available and we do everything to ensure that we keep our Chaplain who runs the breakfast program from week to week. (SBP Coordinator, Perth, Metropolitan)</i>

## 11.4 School-Based Improvement of the SBP

To understand whether schools are changing and developing their program over time, SBP Coordinators were asked if any improvements to the SBP had been implemented. Each year (2015, 2016, 2017) around a third of respondents indicated they had made improvements. Once again, these changes reflected the same suite of issues identified as important to the ongoing operation of the SBP in Chapter 4. These included: improvement of equipment or facilities, provision of a greater variety of food products and/or menus, widening of access to the SBP, modification of operational procedures or protocols, and greater staffing/volunteer support. The degree of correspondence suggests that although schools may vary greatly in terms of their demographic and contextual factors, they face many of the same challenges in ensuring the SBP is continuing to meet the needs of their school community.

*This year the location of the breakfast room was changed which made the breakfasts more accessible. Better storage facilities were also established. (SBP Coordinator, Great Southern, Provincial)*

*The school usually relied upon oats, weetbix and juice, due to lack of volunteers, but this year one of the teachers was happy to do cooked breakfasts twice a week. (SBP Coordinator, Kimberley, Very Remote)*

*Games added to the table for students to play / engage with other students while eating or visiting. Curtains put up in room / tablecloths on tables. Clean up of room - removal of non-essential furniture / equipment. (SBP Coordinator, Wheatbelt, Provincial)*

Examples of improvement that schools made to their SBP equipment or facilities included moving to a better venue, purchasing new food preparation or storage equipment, and upgrading the eating area to create a more conducive environment in which participants can relax and socialise. Modifications to foods/menus encompassed the introduction of cooked breakfasts or new recipes, provision of more fresh foods, or securing of food donations to augment the breakfast menus. Widening of SBP access involved increasing the number of days breakfast was offered or opening it up to new groups of students. Operational changes included improvements to food handling and hygiene standards, or changes to food ordering procedures. Staffing/volunteer support encompassed increased staff involvement, the appointment of paid staff, recruitment of parent helpers, or the greater involvement of students to set up, serve, or clean-up and pack away.

*Breakfast club continues on a Friday for all students, but we now formally offer breakfast to our Aboriginal students on Monday, Tuesday and Wednesday as well as Friday. (SBP Coordinator, Perth, Metropolitan)*

*Having two set days (in week 1 and week 5) when staff know that we will be ordering has streamlined the process. (SBP Coordinator, Perth, Metropolitan)*

*We now have the two staff on duty each morning to support high needs students. (SBP Coordinator, Great Southern, Provincial)*

### 11.4.1 Improvement/Support for the SBP at the System Level

Via the SBP Coordinator Survey, schools were asked what support from Foodbank WA or other external sources (e.g. SBNEP funding bodies, other schools, community organisations) could help improve the operation or impact of their SBP. One of the most frequent requests from metropolitan and provincial schools was for a delivery service to reduce the impost on staff time required to collect products from the local Foodbank WA branch. A few schools suggested an expansion of opening hours to enable access outside of school hours. Foodbank WA staff confirmed that this had been trialled one day per week at the Perth branch, but the uptake by schools was not necessarily sufficient to warrant the additional cost and resourcing implications involved.

Consistent with the results presented in Chapter 5, schools also called for increased range and/or availability of food products, including fresh produce (eggs, cheese, bacon, fruit, vegetables, fresh milk) and items such as rice, pasta and lentils. Two metropolitan schools suggested that the Department of Education could assist in negotiating less onerous terms and conditions<sup>20</sup> that would allow them to access other food rescue organisations, such as OzHarvest and SecondBite, in order to reduce the burden of travel to the Foodbank WA Perth branch and improve their access to fresh produce. Several schools requested assistance in securing support from local supermarkets and businesses in order to establish more reliable supplies of good quality fresh fruit and refrigerated products such as margarine.

Additional funding support from the Department of Education was also suggested to enable schools to improve SBP facilities and equipment, employ a dedicated SBP Coordinator, or access professional development on the management and training of volunteers.

## 11.5 Sustainability and Improvement of Food Sensations

Unlike the School Breakfast Program, implementation of the *Food Sensations* nutrition education program in schools is less strongly driven by the schools themselves. A key issue is that the terms of the Service

<sup>20</sup> Under WA law, food donors (e.g. producers) and grocery product donors (e.g. supermarkets) are protected from civil liability for any personal injury that results from the consumption or use of the food, providing certain conditions are met. However, this protection does not necessarily extend to those who distribute the donated food. Hence, food rescue organisations may require schools/organisations to take responsibility for the quality of the donated food they receive.



Agreement only cover the cost of delivering *Food Sensations* to around 20% of the registered SBP schools per year. Demand therefore always outstrips supply, and *Food Sensations* staff apply selection criteria to determine which schools will be targeted for site visits each year. As described in Chapter 1, in metropolitan schools, *Food Sensations* sessions are delivered by Foodbank WA staff. In regional areas, sessions may be delivered by the *Food Sensations* regional team, or by health professionals who have been trained by the *Food Sensations* team to deliver the sessions independently. Implementation of this Regional Strategy involving partnerships with regional health organisations has increased the reach of the *Food Sensations* program at no additional cost to the SBNEP funding bodies.

As outlined previously, Foodbank WA has actively planned for continuous improvement through its ongoing use of feedback and evaluation instruments with students and teachers. It has also planned for sustainability by developing comprehensive nutrition education resources that are freely available to schools. Through funding from Healthway, a dedicated website has been developed to facilitate dissemination of the resources and Foodbank WA has conducted its own program evaluation [178] to determine the suitability of the resources and delivery modes, and success of the dissemination strategies. As a result of the evaluation, online resources will continue to be readily available to schools and new Everyday and Superhero Foods characters are being developed that are more culturally appropriate for schools in regional and remote areas of WA.

We have seen in previous chapters that *Food Sensations* is highly valued by schools, teachers, and students and that there is a degree of integration with the School Breakfast Program. In the case study schools, we were able to explore further how *Food Sensations* sessions and resources may be integrated within their overall teaching and learning program and health and wellbeing agenda. The Principal of School A, for example, saw *Food Sensations* as contributing to a number of programs that the school accesses in order to promote student health and wellbeing and enhance their pastoral care program.

*Again, it just adds to the overall value of the programs that are run in the school. It's that reinforcement thing. If you did it by itself for a short time, it may not have significant kind of impacts, but...collectively with everything else we're running, with our values, and our pastoral care stuff, and the breakfast programs, and the after-school programs, it's just another example of that reinforcement of those key messages.*

*[Teacher feedback] is positive, really strong. They want to be involved in each year. They [teachers] have already put their hand up again in terms of being involved this year. The health program, as they're doing it, they incorporate it into that. I think that it doesn't necessarily increase the amount of cooking they're doing, but it does give a different... You know, if we didn't have the [Food Sensations] program, they possibly wouldn't be doing any of that stuff, or limited amounts of it. [Having the Food Sensations team visit] gives a bit more credibility, and a bit of oomph, and bit of excitement in the kids' eyes, and all that sort of stuff. (Principal, School A, Perth, Metropolitan)*

Similarly, School E has a very strong focus on improving health outcomes in the school community and partners with a range of organisations to deliver consistent health-related programs and messages. It was noted that the *Food Sensations* team stand out in terms of their ability to engage and deal with the students in a positive way, as other health professionals that visit schools typically do not have expertise in classroom management. The value of *Food Sensations* for School E was the hands-on approach that was highly suited to the student population and enabled the incidental teaching of hygiene concepts whilst reinforcing the notion of nutritious foods and healthy eating.

*It's really good, because it's hands on, the kids get to produce something, they see how it happens, they usually like whatever they've produced, so there's a good chance that they'll go home and talk about that, and that might run through to, "Oh, somebody will have a go at it." Some of the older kids, we know, they do a fair bit of cooking at home anyway. So, it probably just adds to their repertoire of things that they can cook. I think just whenever*

*we can put things out in front of kids where it's a hands-on thing, it's more likely to stick with them. (Principal, School E, Kimberley, Very Remote)*

The value of the practical cooking lessons for the students at School E was reinforced by one of the lead teachers:

*If students value what they're being taught, then that will be engrained within them, that's something that they will take away, and they will remember. And I think that's what types of lessons were taught [in Food Sensations], the quality of the lessons. And the kids absolutely loved it. They love cooking, they really do. I mean they light fires next to the river and cook their fish, or they cook their cherubim [prawns], they're not unaware of how to feed themselves. So, I think these experiences for them help to widen their scope of what they're able to do. I mean, ultimately, they're young cooks, and they're future cooks for their family, and so the lessons that they learn, they are able to, as you know, pass on, and some of our kids cook for their younger siblings. (Lead Teacher, School E, Kimberley, Very Remote)*

The full range of *Food Sensations* resources are on the server at School E and accessible for all staff. Particular resources will be highlighted at different times, depending on the area of health focus of the school at the time. As the lead teacher pointed out, sustainability is about having an integrated approach that enables health messages to be reinforced on a long-term basis.

*Whatever message is our school focus, at different stages, we all bring out that information again and have it on display. Not so long ago we had an article of our school that was in one of the Food Sensations brochures, or booklets. I think when they visit they type something up, and we displayed that again on our notice board, and then we put the posters up that we got given. That's a part of that sustainability. When we do something, we don't just want to... light the firework, watch the pretty display, and then it burns out... We want it to be continuous. So, we put those messages out there every now and then just to remind. (Lead Teacher, School E, Kimberley, Very Remote)*

The availability and quality of the materials and resources produced for *Food Sensations* was seen as making an important contributor to the sustainability of nutrition education in the school and its impact on the wider community.

*Teachers also struggle to come up with materials... It's so helpful to have something in place to be able to deliver. And then, with that is the quality of the [Food Sensations] lessons... The research has been done, the resources have been produced to a high quality, and they are ready to be delivered in the classrooms. If that wasn't available to teachers, teachers would have to come up with something. What's that going to look like? Do you know what I mean? There's so much demand on teachers, so I think it makes a massive impact in that way. And those lessons, they filter out to the rest of the school, and to the students and their parents who are working in the school, so inevitably that will filter up to the community, so I think the message is getting to the community. (Lead Teacher, School E, Kimberley, Very Remote)*

Both the Principal and lead teacher at School E felt that *Food Sensations* could make an even greater contribution to the school's health focus (and hence sustainability) if it was accessible on a more frequent basis – ideally twice per year. It was suggested that technology, such as video workshops, could be used to reduce the requirement and cost for travel to remote locations.

*I'd love to see it more frequently. I'd like to have it at least once a year. At the current rate of once every two years, it's a bit sparse for us. If I could get access to it twice a year, it would be fantastic, because I think we'd get a much bigger [impact]. (Principal, School A, Kimberley, Very Remote)*

From the perspective of *Food Sensations* staff, there is a difficult balance to be struck between wanting to increase the uptake of *Food Sensations* by focusing on new schools, versus supporting schools that are “really trying to do something that’s very pervasive and sustainable, and so they want you to come back on regular basis”. Schools in the East Pilbara region were a good example of where a more comprehensive and integrated approach to nutrition education was in place because BHP program funding allowed the *Food Sensations* team to work with the schools every year.

## 11.6 Value for Money of the SBNEP

Like sustainability, the term ‘value for money’ can be used and interpreted in many different ways. In formal value for money or VfM assessments, methods such as cost benefit analysis or cost utility analysis are typically used to monetise outcomes. We note that this has not been a requirement or focus of the SBNEP evaluation, and the evaluation team has not been given access to the type or level of data needed to conduct formal costings. Hence, we have considered value for money in very general terms using the “4 E’s” recommended by the UK National Audit Office [7] for guidance, namely:

- Economy – minimising the cost of resources used or required (inputs) [spending less]
- Efficiency – the relationship between the output from goods or services and the resources to produce them [spending well]
- Effectiveness – the relationship between the intended and actual results of public spending (outcomes) – [spending wisely]
- Equity – the extent to which services are available to and reach all people that they are intended to [spending fairly]

From the perspective of *economy*, it can be argued that the SBNEP has performed very well. The 2017 funding allocation for the SBNEP was less than \$1 million, yet Foodbank WA has been able to deliver the SBP to over 420 schools and the nutrition education program in some 70 schools. Costs have been minimised in a number of ways, including the bulk purchase of core products, careful management of transport services, and pooling of resources with regional health services to reduce the cost of travel to regional and remote areas for Food Sensations. Resources used in delivering the SBNEP, including food products, have been boosted through ongoing donations from companies such as Harvey Fresh, and grants from Healthway and other philanthropic sources.

Considerable effort has been made to maximise the *efficiency* of the SBNEP. For example, management and organisation of the SBP, including registration, ordering, evaluation and reporting for more than 420 schools is conducted by one full-time staff member (i.e. 1 FTE). The SBP has been able to benefit from the resources and infrastructure that Foodbank WA has established as a hunger relief organisation since the funding allocated under the Service Agreement is not based on full cost recovery. The nutrition education program has achieved a 50% greater reach at no additional cost to the taxpayer through partnerships with regional health organisations.

Within the limitations described in Chapter 3, evidence of the *effectiveness* of the SBNEP has been presented throughout this report. That is, participating schools have confirmed that the intended outcomes and impact of the program are being realised. Most importantly, the program is successful in feeding vulnerable children. Stakeholders also perceive that the SBNEP has been instrumental in increasing the capacity for learning of those vulnerable students and improving their attitudes, knowledge and skills in relation to healthy eating. Schools have also been able to realise the intended benefits of improved social relations and greater community cohesion.

*Equity* is a central concern of the SBNEP in that it aims to improve the nutrition and wellbeing of vulnerable children. As noted in earlier chapters, schools that serve communities in low socioeconomic areas (as defined by low ICSEA rating) are seen as high priority for participation in the SBNEP. However, schools in more

advantaged areas (high ICSEA) can also access the program if they identify groups of vulnerable or disadvantaged students in their school community that need support. In terms of the program reaching all vulnerable children of school age, this flexible approach is preferable to one which restricts access on the basis of population-level measures of advantage/disadvantage such as the ICSEA and does not recognise that pockets of disadvantage may exist in many communities.

In concluding this final results chapter and reflecting on the value for money that the SBNEP has delivered to the WA Government funding bodies, it is noteworthy that the Victorian Government has committed funding of \$13.7 million over four years (2016-2019) to establish breakfast clubs in 500 disadvantaged primary schools. An interim evaluation report shows that some 25,000 students are accessing the Victorian School Breakfast Clubs Program each week [180]. Albeit a rather crude comparison, this translates to funding of \$6,850 per school per year (or \$137 per student) in Victoria, compared to \$2,336 per school per year (or \$57 per student) in WA (which caters for approximately 17,500 students). We note that this simplistic comparison does not take account of the much larger distances involved in transporting food to remote WA schools, nor the cost of delivering the equivalent of the *Food Sensations* nutrition education program.

## 11.7 Summary / Key Points

- This evaluation has approached sustainability from the perspective of whether the SBNEP can maintain its activities, intended outcomes and impact over time.
- At least 85% of schools indicated the SBP was sustainable.
- The average *continuous* length of involvement in the SBP was 7.44 years, highlighting the extent to which the SBP has been embedded across a large number of participating schools.
- The potential threats to sustainability identified were consistent with the factors affecting implementation and ongoing operations presented in Chapter 4 including, staffing levels and access to volunteers, time constraints related to staff employment contracts (i.e. part-time SBP Coordinators), and financial and budgetary issues.
- Many schools pointed out that the SBP would be sustainable as long state government funding for the supply and distribution of food products was continued.
- Measures used by schools to ensure the sustainability of the SBP included, whole school approach and part of strategic plan, promotion to the school community, managing volunteers, enlisting student support, fostering community partnerships and ensuring adequate facilities.
- Sustainability of *Food Sensations* was considered in terms of the extent to which schools integrate it with the School Breakfast Program, school curriculum, and other health-related programs.
- The *Food Sensations* program is highly valued by schools, teachers, and students and there is a degree of integration with the School Breakfast Program through the use of the *Food Sensations* resources.
- The practical cooking lessons were highly prized and schools requested more frequent access to Food Sensations sessions on a regular basis (e.g. twice per year).
- Some schools utilise *Food Sensations* resources in range of settings and learning areas in order to reinforce key health messages.
- Delivery of *Food Sensations* under the SBNEP Service Agreement is currently restricted to around 20% of registered SBP schools per year. Demand therefore always outstrips supply, and *Food Sensations* staff apply selection criteria to determine which schools will be targeted for site visits each year.

# 12. Conclusions

## 12.1 Introduction

The weight of evidence derived from the review of the national and international literature relating to school breakfast programs, together with the findings of this evaluation, suggest there is no cause for doubt that the SBNEP is both necessary and effective. Hence, future questions and discussion about the SBNEP can focus on how to maximise the benefits of the program through a more strategic, integrated, principle-driven approach.

The three-year longitudinal nature of this project has afforded some deep insights from a range of stakeholders of the impact of the SBNEP. Whilst the provision of breakfast for students and promotion of healthy eating messages may seem relatively straightforward, this study has shown it can be a multidimensional and highly integrated enterprise. This has made the process of evaluation both challenging and rewarding, and has resulted in a range of inter-related concepts and rich data for inclusion in this report.

In this final section we aim to provide a synthesis of the major study findings, informed by the literature reviewed in the course of the research, to answer the evaluation questions. Where appropriate, short- and long-term recommendations are provided as next-step considerations for the SBNEP Reference Group and WA Government funding bodies.

## 12.2 Access to Breakfast by Vulnerable Children

### **Has there been an improvement in the nutrition and wellbeing of vulnerable youth?**

The results of the SBNEP evaluation clearly show that the program is successful in assisting WA schools to address the hunger needs of vulnerable youth and students at educational risk due to factors such as poverty, family food insecurity, family dysfunction, Aboriginal or Torres Strait Islander heritage or cultural and linguistic diversity. The SBNEP is currently reaching more than 420 schools and 17,500 students per year, located across all regions of WA - from inner metropolitan area of Perth to the remotest regions of the state.

The need to provide breakfasts in WA schools is increasing, not decreasing, as evidenced by the increase in average number of days of breakfast provision across WA from 2015-17. Schools in highly disadvantaged communities often provide regular lunches and snacks as well as breakfast, and emergency food parcels for families when needed. The core products provided by Foodbank WA are seen to be of good quality and provide a reasonable level of variety for students. Gaining access to good quality fresh produce is challenging for metropolitan and regional schools alike, albeit for different logistical reasons. The ability to provide meals of sufficient nutritional value and variety is a concern for some schools, however, the majority are able to supplement their menus with products sourced through school funds, donations, and school/community kitchen gardens. We note there is evidence that the additional products being provided in a small proportion of schools are not compliant with the Department of Education's Healthy Food and Drink Policy. While this is not necessarily a general cause for concern, the right to access healthy food may be of greater importance for economically disadvantaged students whose overall diet is particularly nutrient poor and who are at increased risk of diabetes and other diet-related illnesses and diseases.

The support for vulnerable youth provided via the SBNEP is not strictly limited to low socio-economic areas, since pockets of disadvantage exist across the social spectrum. Schools in more affluent areas report the need to assist families who are struggling due to job losses and economic downturn. Such schools can make a case for accessing the SBNEP in order to meet the needs of their disadvantaged students, and those that have done so are very appreciative of the support. This flexible approach to SBP registration in WA is

commendable in being more consistent with the best practice principle of universal free breakfast identified in the research literature [2, 3].

## 12.3 Impact on Capacity for Learning

### Has children's capacity for learning increased?

As seen in Chapter 2, there is good evidence within the research literature that school breakfast programs have a positive impact on students' educational outcomes. This was certainly true of the current evaluation for which there was strong, consistent agreement among all stakeholder groups that the SBP had a positive influence across a range of factors relating to capacity for learning, including readiness for learning, on task concentration, attendance, punctuality, productivity in class, behaviour and social skills. Whilst acknowledging the limitations of self-report data and qualitative measures, it is clear that schools see strong benefits of the SBP for individual students – particularly in terms of increased readiness for learning and greater ability to concentrate and focus. At the classroom level, the SBP is seen to have a positive impact on the teaching and learning program by smoothing students' transition from home to school, reducing incidences of inappropriate and disruptive behaviour, and generally contributing to a greater sense of calm and order. Schools based in areas of severe disadvantage and food insecurity stressed that if they were not able to feed students, then learning could not take place and classrooms would be barely functional. It is important to note that the positive impact at the class level translated to positive impact on the overall school climate. A smooth transition from home to school and reduction in inappropriate behaviour across the classes contributed to a greater sense of calm and order at the school level.

While alleviating hunger and boosting energy levels are fundamental prerequisites for learning, the social environment of the SBP is also seen as influential in lifting students' mood and increasing their receptiveness and willingness to engage with learning. Students themselves were able to recognise and articulate the positive influence of the SBP on their capacity for learning. Whilst acknowledging impact across the full range of capacity for learning indicators, they particularly highlighted the positive influence on their attendance, punctuality, calmness and behaviour.

There was some evidence that students who attend the SBP on a frequent basis reap greater benefits in terms of capacity for learning than infrequent attendees. Among the case study students, SBP attendance rate was lower for secondary students with correspondingly lower school, teacher and self-report ratings for school attendance, and other indicators of capacity for learning. Case study School B noted that students' attendance at the SBP dropped when they joined the secondary school program. We know that the onset of puberty has a negative effect on students' self-efficacy, school connectedness and academic achievement [4], so there are good reasons for schools to consider ways of boosting SBP attendance to mitigate these negative effects. Teenagers are more likely to be breakfast skippers or to arrive at school too late for a 'sit down' breakfast, hence traditional SBP models may not suit all schools that cater for secondary students.

## 12.4 Impact on Attitudes Towards Healthy Eating

### Have children's attitudes towards healthy food and nutrition improved?

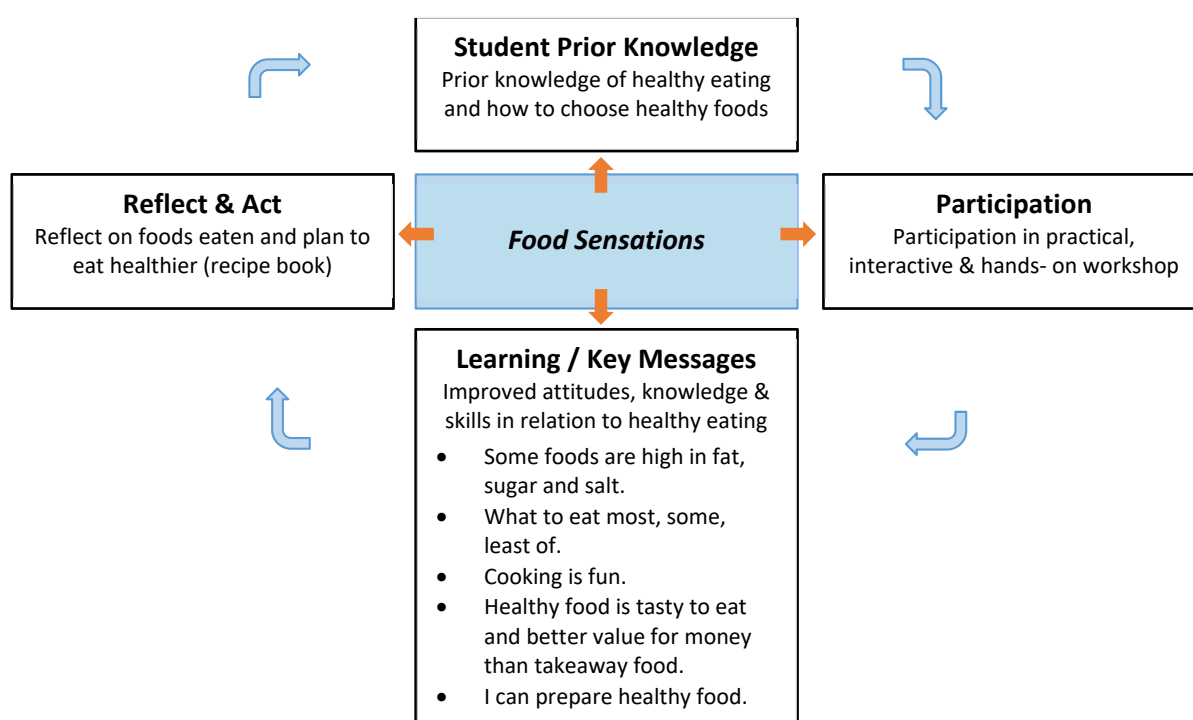
We have seen through the review of the literature that school breakfast programs can be an important vehicle for promoting better eating patterns and modelling healthy behaviours. In the WA context, at very least, SBP students are being exposed to healthy food choices (Foodbank WA-supplied products) that they may not otherwise encounter in the home. Accordingly, the majority of stakeholders we canvassed believe the SBP does play an important role in promoting positive attitudes to healthy eating. Students were more optimistic than the adult stakeholder groups about the influence of the SBP on their willingness to try new foods, but all stakeholders were in strong agreement that the SBP contributes to the overall health promoting environment of the school and school community.



In contrast to the relative continuity of the School Breakfast Program where students potentially receive repeated exposure to health eating messages, *Food Sensations* is a targeted, short term nutrition education intervention that schools may only be able to access every few years. *Food Sensations* sessions are typically only 90 minutes' duration, so it would be unreasonable to expect a major shift in students' attitudes to healthy eating after just one session. It is both pleasing and perhaps surprising then, that the evidence suggests positive gains, at least on a short-term basis, are made by students that participate in the program. Noteworthy change after completing a *Food Sensations* was that students were more likely to believe healthy meals are easy to prepare and that they were capable of preparing them. Teachers who participated in *Food Sensations* were resoundingly positive about the suitability of the content and resources to students across a range of ages, social contexts and levels of literacy and numeracy. They reported that the practical, hands-on cooking experiences were highly motivating and empowering for students and hence they were often keen to try out the healthy recipes at home. Importantly, teacher feedback and the results of the student evaluations confirm that maintaining a clear focus on a limited set of key messages is highly effective within the constraints of a single lesson.

These findings support an earlier study of the impact of *Food Sensations* that showed the sessions “engage students in an innovative cycle of health and nutritional learning” [1, p. 111]. Figure 12.1 illustrates how students' prior knowledge is used as a springboard to engage students in practical, hands-on activities through which several key healthy eating messages are conveyed. Students share the food they have prepared with the class as a whole and reflect on the foods they typically eat and what they might do differently in future.

**Figure 12.1: *Food Sensations* model of engagement and impact**



Source: Modified from Byrne, et al. [1]

The international research literature shows that students' attitudes and behaviours in relation to healthy food and nutrition are more likely to improve where the whole school environment has been modified to ensure key messages are constantly reinforced. This is also evident in the data collected for this study. In some schools there is little or no integration of the SBP with other school and classroom activities. However,



many do achieve some level of integration. For example, primary schools often use *Food Sensations* 'Superhero Foods' resources such as placemats and posters to promote healthy eating messages and as a stimulus for discussion about healthy food choices. Primary schools also commonly link the SBP to Crunch&Sip and other health-related initiatives such as the kitchen garden program. Less commonly, there are schools that adopt a whole school approach to student health and wellbeing and actively link the SBP and *Food Sensations* to a range of learning areas and curriculum strands, including life skills programs. In this way, key messages about nutrition and healthy eating are being reinforced in multiple ways through a variety of experiences. More so than others, these schools recognise the power and value of the *Food Sensations* program and resources in supporting their health and wellbeing ethos and agenda across the school.

## 12.5 Impact on Knowledge and Skills Regarding Healthy Eating

### Have children's knowledge and skills in relation to healthy food and nutrition increased?

The findings in relation to attitudinal change are echoed in those relating to students' knowledge of healthy food and nutrition. As noted, the mere provision of healthy food choices through the School Breakfast Program goes some way to reinforcing the importance of healthy eating and informing students how to make healthy choices. However, schools report that involving students in preparing and/or serving food for the Breakfast Program further enhances their ability to choose and prepare healthy breakfasts and provides them with important knowledge and skills relating to food handling and hygiene. Students themselves were very positive about the influence of the SBP on their knowledge and skills – more so in fact than the adult stakeholder groups.

Discernible increases in students' knowledge of healthy food and nutrition were found for the *Food Sensations* program. Both primary and secondary students showed small gains in a range of areas, including the correct identification of healthy versus less healthy foods, knowledge of the nutritional features of takeaway foods, knowledge of the amount of sugar in soft drinks, ability to interpret food labels, and knowledge of kitchen safety and hygiene practices. While the overall improvement in students' knowledge was statistically significant, we believe the results may not be a true reflection of the level of change, and may in fact be an underrepresentation. This is because the design of the evaluation instruments was heavily influenced by the perceived need for efficiency in having a single generic assessment instrument used for all *Food Sensations* sessions. Since not all content is covered in every *Food Sensations*, we believe assessment/evaluation instruments tailored to the content of specific lessons will give a more accurate picture of change in students' knowledge and hence better inform continued improvement and refinement of the *Food Sensations* program and the key messages that it seeks to promote.

## 12.6 Community Engagement and Partnerships

### Have levels of partnership and collaboration increased?

Parental engagement is recognised to be a key predictor of positive outcomes for children's health, wellbeing and education. The literature suggests that while schools in disadvantaged communities may be aware of the importance of engaging parents in their children's schooling, they often rely on passive measures that have little effect. Evidence drawn from SBNEP evaluation shows that approximately 40% of SBP schools draw on support from parents and families to assist in running the SBP. However, they commonly report difficulty in recruiting sufficient volunteers from within the school community and for some this was identified as a barrier to further expansion and improvement of their breakfast program. A few schools have recognised the value of the SBP as a catalyst for parental engagement. By promoting it as a community event where parents/carers and children alike can join in and socialise, they have helped bring families 'into the fold' who might otherwise be difficult to reach and engage.

Over the course of the evaluation, there was an increasing trend for schools to enlist help from students in order to reduce the burden on teaching staff. Some schools emphasised the value of student involvement as contributing to the development of important life skills and greater self-efficacy, as well as instilling values of reciprocity and giving. It is noteworthy that some schools saw the stringent health regulations regarding food handling as a deterrent to student involvement, while others saw this as an educational opportunity.

Only about a quarter of schools reported that they receive support from the wider community (other than parents/families and students) for their breakfast program. This includes outside volunteers to assist in the day-to-day running of the program, donations of food products and financial support to purchase supplies or equipment. Schools that were successful in securing support from local businesses, community organisations and parents and families attributed this to being seen to have a genuine comprehensive ethos of care and concern for the health and wellbeing of students and families.

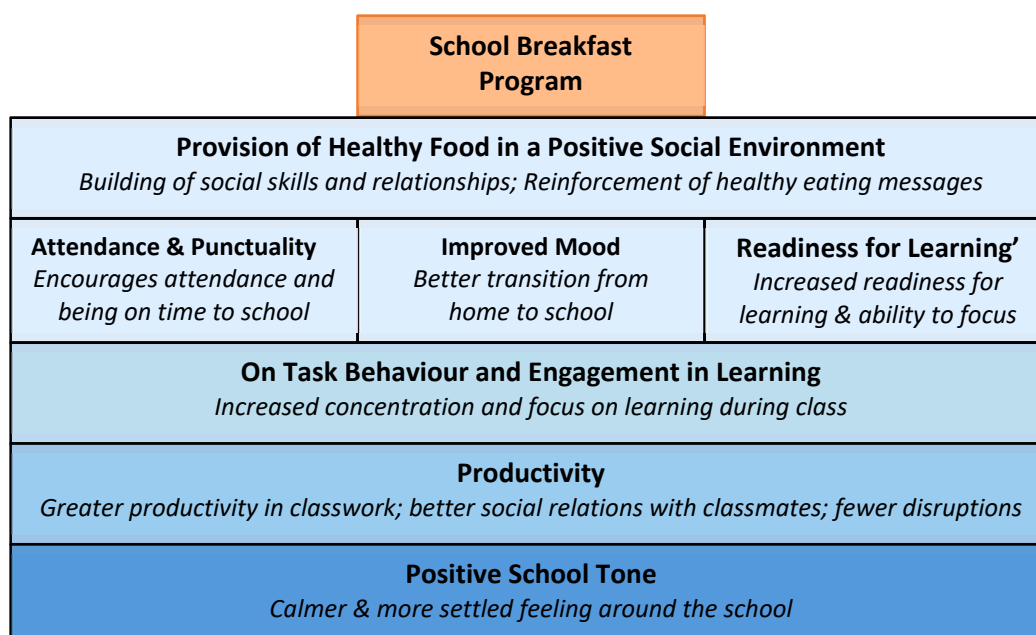
## 12.7 Impact on Community Cohesiveness

### Has there been increased human capacity and community cohesiveness in targeted schools and communities?

In examining the impact of the SBNEP on human capacity and community cohesiveness we have considered how participation in the SBP may have contributed to improving students' personal and social capability and the quality of their relationships with adults (staff and SBP volunteers) and peers, as well as the potential broader social influences of the program. As other studies have found, stakeholders – including students themselves, reported that the SBP was a safe and supportive social setting in which students were able to practice their social skills, develop better awareness of their own and others' feelings, and learn how to manage social situations. As with capacity for learning, the students who attended the SBP more frequently reported higher levels of impact on personal and social capability than those who attended infrequently.

For many schools, the social benefits of the SBP are seen as equally important and possibly a catalyst for the benefits noted in relation to capacity for learning. The informal setting of the SBP is perceived to contribute to the development of positive relationships between students and staff, and bring students together in a way that encourages a widening of friendship groups and greater sense of connection to the school. Those schools that include parents and families in the SBP report significant benefit for school-community relationships. Again, the informality of the setting and association of food with celebration and sharing helps break down barriers with families who may not have positive attitudes to schooling and facilitates the development of more cooperative relationships.

One of the most pervasive themes is that of calmness. Students in particular reported that participation in the SBP helped them to feel calm at the start of the day, and teachers observed the marked difference in some students' behaviour and composure if they had missed breakfast club. School leaders and teachers described the SBP as having a palpable effect on the overall atmosphere of calmness and orderliness of the whole school. This 'cascading' influence of the SBP is captured to some extent in Figure 12.2. It builds on an earlier investigation of the School Breakfast Program [1] and attempts to encapsulate the interrelationship of the social and educational benefits at the whole school level. Some schools report that those benefits seen at the whole school level extend further to a reduction in incidence of antisocial behaviour beyond the immediate school environment.

**Figure 12.2 School Breakfast Program model of engagement and impact**

Source: Modified from Byrne, et al. [1]

## 12.8 Satisfaction with the SBNEP

### Have program participants (staff, community organisations, community members) been satisfied with the program?

Across the entire period of the evaluation, high levels of satisfaction with the SBNEP were expressed by school leaders, teachers, parents, and students alike. These stakeholders made it clear that the School Breakfast Program is not only essential to alleviate hunger and disadvantage within the school community but to ensure the effective running of the school. The issue of shame or stigma was noted by a few school representatives, however these schools took action to widen the access or reposition the program to mitigate the perception that the SBP was addressing poverty or neglect. Some concerns were expressed by a minority of school representatives that the SBP may be facilitating an abdication of parental responsibility or promoting a culture of dependence. This view is not supported by the international literature, and as we have seen, feeding programs are an effective 'social protection tool' [5]. This may be an area where further work can be done to educate schools about the benefits of the School Breakfast Program.

While overall satisfaction with the SBP is very high, there are some commonly held 'wish list' items surrounding the delivery and pick up of Foodbank WA core products and access to fresh produce. These issues do not prevent schools from participating but are perceived as a barrier to expansion and improvement of the SBP in individual schools. We note that schools in which the breakfast program is part of an integrated approach to health and wellbeing seem better placed to deal with the inherent challenges and resource implications of feeding children on a daily basis. We pick up on this point in the following section regarding the SBP delivery model.

School leaders and teachers are very appreciative of *Food Sensations* and have praised the organisation, teaching and classroom management skills of the presenters. Feedback from parents and students affirms the positive influence of the *Food Sensations* cooking experiences on students' motivation to prepare and

eat healthy meals. Parents and students recommend that schools include more opportunities for hands-on nutrition education like *Food Sensations*. The current terms of the Service Agreement only allow for participation of approximately 20% of registered SBP schools per year. Hence, the demand for Food Sensations constantly outstrips supply. Schools that have an integrated approach to health and wellbeing have noted that more frequent access to *Food Sensations* would greatly enhance their programs. Consideration should therefore be given to an increase in investment of resources to enable a greater number of school visits each year and to investigate the use of more flexible delivery methods including the use of digital technology to engage a larger number of schools – particularly those in remote and regional areas where travel time and costs are prohibitive.

## 12.9 Delivery Model

### What factors (both positive and negative) impacted on SBNEP implementation?

In reporting the factors that impacted on the SBNEP implementation, it is critical to understand the key role of individual school and community contexts. School communities across WA differ greatly in terms of their social contexts and health and educational learning needs, hence they also differ in terms of the rationale for implementing a breakfast program and desired outcomes and benefits. This study has identified the key implementation criteria and characteristics of SBPs in WA schools and captured them in a series of continua that reflect the flexible nature of SBP delivery across the state (Figure 4.2). These continua encompass frequency of operation, location/setting of the SBP, meals and menus provided, use of volunteers, nature of the SBP Coordinator role, and level of student involvement in running the SBP. Whilst we do not suggest there is a one-to-one correspondence, schools where the SBP is embedded within a whole school approach to improving student wellbeing and/or building community capacity generally have a more inclusive approach to the SBP and draw on a wider range of community resources (i.e. characteristics represented on the right hand side of the continua).

Many of the factors identified in the literature as having an impact on the implementation of school breakfast programs were also evident in the SBNEP evaluation. Concerns about consistency of staffing, access to volunteers, time constraints, suitability of space, facilities and equipment to run the program, availability of funding, variety of foods and menus available, level of integration with strategic planning, and community promotion and buy-in were raised by case-study and non-case-study schools. However, none ultimately prevented implementation of the SBP, nor negated the perceived benefits and impact of the program within the individual school contexts<sup>21</sup>. To some extent, it can be argued that the ‘negative’ factors that impact on SBNEP program implementation are indicative of a need to better tailor the program to the contextual needs of the school, students and community. Evidence from the international literature and participating SBNEP schools suggests that barriers to implementation can be minimised in time if a more integrated, whole school approach is adopted. We hasten to stress that a breakfast program with a ‘narrow/singular purpose’ or that is ‘stand-alone’ in terms of integration with other school programs still serves an essential purpose in alleviating hunger for vulnerable children, and therefore should not be devalued. However, there is clear evidence from the literature and the SBNEP evaluation that when the SBP is positioned within a broader purpose and rationale and highly integrated with strategic planning, there are greater opportunities to achieve positive impacts at the student, classroom, whole school and community level.

In this regard, the Health Promoting Schools (HPS) Framework<sup>22</sup> is highly relevant. It advocates a whole school approach to health promotion that “considers the broad health needs of all school community members” [6] through the purposeful linking of school environment (ethos, culture, policies, organisation, infrastructure), curriculum (teaching, learning, professional development) and partnerships (students, staff, professionals, agencies, community and services). The HPS Framework is highly consistent with the Department of

<sup>21</sup> It should be noted that such factors may have been a deterrent for some schools to participate in the SBNEP, but we do not have a way of identifying schools that have considered but declined to implement a breakfast program.

<sup>22</sup> See <http://wahpsa.org.au/resources/health-promoting-schools-framework/>

Education's strategic direction for 'Building a culture of high performance and high care in every school'. While the HPS Framework is freely available to schools on the Department of Education website, and schools can access support from the WA Health Promoting Schools Association, there may be value in more actively supporting its dissemination to SBNEP schools where the need for an integrated approach to health and wellbeing is more acute. Our research found that schools with health promoting characteristics already embedded in their operations evidenced greater positive outcomes. It is possible then, that the SBP implementation continua can be re-designed as a self-reflection tool to assist schools to identify how they might increase the impact of the SBP in response to changing community needs. The tool could provide the basis for continuous improvement at both the school and system level.

## 12.10 Value for Money

### Is the program good value for money?

The scope of the SBNEP evaluation has not included a cost benefit analysis, and indeed the literature supports our view that analyses focused on economic benefits or social return on investment are best conducted separately from program evaluation. The literature also highlights the inherent difficulties and complexity of any exercise aimed at monetising the impact and benefits of a single program that is embedded in an intricate network of influences and contextual factors. We have therefore approached the issue of value for money in terms of the '4 Es' of economy (spending less), efficiency (spending well), effectiveness (spending wisely) and equity (spending fairly) [7], and considered what strategies have been used to achieve each of these goals.

In this regard, Foodbank WA can be commended for ensuring that the State Government's investment in the SBNEP has delivered value for money. Every effort has been made to minimise spending by the pooling of resources with partner organisations and utilisation of existing infrastructure and resources associated with Foodbank WA's role as a food rescue and hunger relief organisation. Efficiency has been achieved through the streamlined staffing of the School Breakfast Program and by partnering with regional health organisations so that the *Food Sensations* nutrition education program can be provided to additional schools and students at no extra cost to the taxpayer.

As described throughout this chapter and the report as a whole, stakeholders perceive that the SBNEP has been effective in delivering the intended outcomes and impact. The primary goal of feeding hungry children has been achieved and this has translated into a range of benefits for individual students, classrooms, and schools, and hence for the wider community.

Equity is of particular relevance to the SBNEP since this is about determining whether the programs or services in question are accessible to all the people for whom they are intended. In the case of the SBNEP, this means disadvantaged or vulnerable youth. As noted earlier, the current SBP registration protocol does not arbitrarily exclude schools on the basis of population-level measures of socioeconomic disadvantage. Rather, it allows schools that may be based in apparently 'middle class' communities to make a case for why the program is needed for one or more groups of at-risk or disadvantaged students. From an equity standpoint, the literature and the evidence from this evaluation we believe this protocol should be continued.

## 12.11 Sustainability

### Has there been an impact on the longer-term sustainability of the program that better meets the needs of schools?

The literature on sustainability of SBPs points to the need for program flexibility in order to overcome barriers to participation and adapt to student needs. The SBNEP evaluation has therefore approached sustainability from the perspective of whether the program can maintain its activities, intended outcomes and impact over

time in response to changing community needs and contexts. In essence, this positions sustainability as being about continuous quality improvement.

Quantitative evidence of the length of continuous involvement of SBP schools together with qualitative evidence suggests that the program is sustainable - albeit with the premise that equivalent State Government funding continues to be provided into the future. We note that this would need to take account of rising costs in transport and food prices, among other things. The funding arrangements for other programs may also impact on SBP sustainability - the School Chaplaincy Program, for example, since some SBP schools rely heavily on support from their Chaplain to run their program.

At the school level, the main threats to sustainability were perceived as staffing levels and access to volunteers, time constraints, and financial/budgetary issues that limited the provision of adequate facilities and menu variety. As foregrounded elsewhere, a key 'protective factor' to mitigate these threats seems to be the adoption of an integrated approach to health and wellbeing which embeds the SBP in strategic planning. Our data – and the international literature - suggest that schools where this is in place seem better able to generate and capitalise on opportunities for securing additional resources. Specific strategies that schools employ to ensure sustainability included active promotion of the SBP to the school community, careful management of volunteers, greater use of student support to run the program, allocation of appropriate facilities and equipment, and the fostering of community partnerships to increase resources including food donations, funding for additional food products or equipment, and volunteer support.

There is good evidence that many schools do change and develop their SBP over time. As noted earlier, the frequency of breakfast provision has increased such that more schools are operating their SBP five days per week. Other changes and improvements that schools reported making during the 2015-17 period closely correspond to those areas identified as potential threats to sustainability. That is, schools enlisted greater staff or volunteer support, actively promoted the program to the school community, improved equipment or facilities, provided greater variety of food products and menus, and so forth.

The review of literature found evidence that schools may benefit from the input of 'expert partners' in building their capacity to form partnerships and collaborations that support the operation and sustainability of their SBP. Consideration should therefore be given as to what mechanisms already exist for schools to access such support. For example, organisations such the WA Health Promoting Schools Association (WAHSA) and Nutrition Australia may be able to offer some support. Schools can also make use of resources such as the Program Sustainability Assessment Tool [8] which identifies eight domains or factors that contribute to program sustainability. These encompass environmental support, funding stability, partnerships, organisational capacity, program evaluation and program adaptation.

## 12.12 Performance Monitoring and Continuous Improvement

### What performance monitoring and continuous quality improvement arrangements should exist into the future?

We noted earlier that program sustainability is achieved through continuous quality improvement (CQI). In turn, CQI relies on performance monitoring – that is, having access to information that will allow judgements to be made about whether a program is functioning as intended and delivering its intended outcomes and impact. The challenge for the SBNEP in this regard is to ensure that program monitoring requirements do not become so burdensome that they inhibit or deter schools from participating. As noted elsewhere, Foodbank WA monitors the SBP and *Food Sensations* via an annual survey and evaluation instruments (respectively) as part of its Service Agreement. During the three-year evaluation period, SBP schools have been asked to provide more comprehensive information than has normally been required. This has placed extra burden on SBP Coordinators and others involved in the evaluation. For future ongoing monitoring, it may not be necessary for this level of intense data collection to continue.



It is important, however, that performance monitoring of the SBP is relevant and useful to schools themselves, since continuous quality improvement is both a school level and system level concern. Indeed, the rationale for implementing a breakfast program, the outcomes and impact sought, and method of implementation are all decided at the school level. For future performance monitoring then, it would be preferable to modify the existing SBP Coordinator Survey instrument so that it functions as an annual 'SBP Evaluation Tool' to capture succinct information about each school's rationale for the SBP and intended outcomes and impact (e.g. improve attendance, promote healthy eating messages, improve social relations, etc.). Series of Likert-scale survey can then be tailored to capture information that directly relate to the relevant outcomes and impact. In this way, schools can track their own performance in achieving those outcomes and impact, and the data can also feed into system level evaluation that is a more accurate reflection of what schools are aiming to achieve.

An important element of performance monitoring is to have an understanding of the patterns of student participation in the SBP. Currently it seems few schools have adopted systems for tracking student attendance. This is perhaps not surprising given the voluntary, informal nature of breakfast programs. Schools may also have concerns about imposing extra work on those who run the SBP, or of possible negative perceptions by students that they are about being 'monitored'. We note, however, that formal records with student names are not necessarily required and schools could develop their own method for keeping track of numbers and noting trends over time that are not labour intensive or intrusive.

We have noted previously that the SBP implementation continua developed during this evaluation could inform the development of an 'SBP Integration Self-Reflection Tool' to be used by schools that wish to adopt a more integrated approach. This could help schools reflect on how the SBP works in their particular context, the strategic focus for their SBP, the degree of integration based on the 'Health Promoting Schools' Framework, and the supports, partnerships, school capacity, planning and communication needed to ensure the ongoing improvement and operation of the SBP.

## 12.13 Program Improvement

### How can the operation of the program be improved in the future (lessons learned)?

The evaluation of the SBNEP has provided compelling evidence of the high level of regard stakeholders have for both the School Breakfast Program and *Food Sensations* nutrition education program. No areas of low performance were identified, and stakeholders are both aware and understanding of the resourcing constraints within which Foodbank WA operates these programs. However, the extensive feedback elicited from stakeholders and Foodbank WA has highlighted some areas where efforts could be targeted in order to enhance service quality. While some have resourcing implications, several are focused on assisting schools to build their own capacity to access and generate resources.

#### School Breakfast Program

- **SBP Toolkit:** The SBP Toolkit is an excellent resource for schools in setting up a school breakfast program. Since schools report greatest difficulty in accessing volunteers and financial resources, a short term investment could be made in upgrading the toolkit to provide more extensive information and suggestions about recruiting and managing volunteers, engaging parents and community support, and tracking attendance. The toolkit could also place greater emphasis on the need to comply with the Department of Education Healthy Food and Drink Policy so that schools have a better understanding of the health implications of providing high sugar or nutrient poor foods to vulnerable populations. An example of a comprehensive SBP Toolkit is that provided by the Breakfast Club of Canada<sup>23</sup>.

<sup>23</sup> See <http://www.breakfastclubcanada.org/useful-resources/>



- *Monitoring of SBP Attendance:* Few schools seem to keep records of attendance at the SBP. To assist with program monitoring and continuous improvement schools should be encouraged to keep informal attendance records for the SBP. As part of the SBP registration process, schools could be asked to outline how informal records will be kept.
- *Use of School Networks:* Schools that access core products direct from a Foodbank WA branch find it difficult to access during school hours due to the length of time required for travel, pickup and unpacking which may take several hours. School networks and hubs could therefore be encouraged to pool resources and develop a roster system for collecting goods so that the number of trips required by individual schools could be reduced. This may require a minor change to the limit Foodbank WA imposes on the number of people that can be authorised to access products on behalf of the school.

Networks may also be better placed to garner community support in the form of volunteers, food donations, philanthropic grants or funding to purchase additional food supplies or equipment. This might also include funding of a staff position to manage and oversee SBPs.

- *Dissemination of SBP Best Practice:* Several schools have suggested forming a Breakfast Club network where information can be shared. Schools have developed innovative ways of delivering the SBP and value-adding, so these strategies could be more widely shared. This could be offered through the Foodbank website or dedicated area within the Department of Education website. As this has workload implications for Foodbank WA staff, the funding bodies could consider whether additional resources could be redirected from within the student health/wellbeing portfolios of their own agencies.

### *Food Sensations*

- *Assessment Tools:* The existing evaluation instruments for *Food Sensations* should be modified and separate instruments created and tailored to the content of specific lessons.
- *Resources for Secondary Students:* The Superhero Foods characters and accompanying resources are very effective in engaging primary students and secondary students in some contexts. Given the higher incidence of breakfast skipping, poor diet and health-related risk-taking among teenagers, consideration should be given to assembling nutrition education resources targeted to older teenagers. This may not necessarily involve new resources, but could involve adapting current resources or tapping into resources that are currently available elsewhere.
- *School Visits:* Consideration should be given to allocation of more resources to allow for more school visits per year. This could include a specific allocation to support schools that have adopted a 'Health Promoting Schools Framework' and are seeking more sustained engagement with nutrition education across the school and within their community.
- *Flexible Delivery Options:* The potential for developing online or real time video workshops should be explored to allow remote schools and others to have greater access to the program – particularly within the context of a whole school approach to health and wellbeing.
- *Staff Development:* The high quality of *Food Sensations* face-to-face teaching and online resources is recognised and valued by stakeholders. To maintain this high standard, ongoing professional learning opportunities should continue to be provided to induct new staff and maintain and upgrade the knowledge and skills of existing staff. Given the complex social environments of the schools that the *Food Sensations* team engage with, this ongoing professional learning should include cultural competency training and managing/guiding student engagement and behaviour.

In the final chapter, we present a succinct set of recommendations that flow from the conclusions and suggested areas of improvement, as well as considerations about performance monitoring and continuous quality improvement.

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## 13. Recommendations

The results of the evaluation have confirmed that the School Breakfast and Nutrition Education Program is a highly successful and efficiently run program. The extensive feedback from stakeholders has been highly positive; however, areas where further improvement could be attained have been identified. The following recommendations are made in the spirit of ensuring that the current quality of service by Foodbank WA is not compromised and that the program can continue to develop and meet the changing needs of vulnerable students and communities into the future. These have been organised according to the applicable program.

### 13.1.1 School Breakfast Program

- R1** That support for the School Breakfast and Nutrition Education Program is continued and consideration given to increasing the resource allocation to reflect the recommendations that follow.
- R2** Consider providing additional short term resources to **upgrade the School Breakfast Program Toolkit** to include more extensive information and emphasis on recruiting and managing volunteers, engaging parents and community support, tracking attendance, and complying with Department of Education Healthy Food and Drink Policy guidelines.
- R3** As part of the SBP registration process, request that schools indicate how they will **track student attendance** on a formal or informal basis for performance monitoring purposes. It is suggested that a pilot study with a selection of schools is undertaken to trial and refine effective mechanisms to formally or informally track student attendance at the SBP.
- R4** Consider providing additional resources to **set up a School Breakfast Program Best Practice Network** to share and develop innovative ways of delivering the SBP and value-adding. It is suggested that this network be online to facilitate engagement and collaboration and could be housed either within the Foodbank WA or Department of Education website.
- R5** Foodbank WA and the Department of Education should **encourage more collaboration amongst schools** for efficiencies in food collection and resourcing of breakfast programs. This could be done at a District and School Network level through Network Principals and via school leader professional associations. We propose conducting a pilot study with selected networks covering key districts across the state to trial the feasibility and effectiveness of this approach.
- R6** Establish a **small grant scheme for SBP schools to apply for funding to upgrade equipment or facilities** as part of a continuous improvement plan. Dependent on available funding, the scheme could be an annual or biannual process where schools undertake an application process that is assessed by the SBNEP Reference Group.
- R7** Where there is a **demonstrated need to assist vulnerable students**, continue to **allow schools in higher socioeconomic areas to access the School Breakfast Program**.
- R8** **Develop the SBP implementation continua into an 'SBP Integration Self-Reflection Tool'** for schools to assist them to transition to a more integrative, whole school approach. **Trial the SBP reflective tool in a small number of schools to develop and refine the instrument and ascertain its effectiveness.**
- R9** Consideration should be given to **future development of alternative SBP delivery models** that encourage greater participation by secondary students. This could include trialling of a 'Grab'n'Go' model in a small number of schools.

### 13.1.2 *Food Sensations*

- R10** Re-develop and pilot existing *Food Sensations* student evaluation instruments to provide better data for performance monitoring purposes by tailoring them to the content of specific lessons.
- R11** Tailor *Food Sensations* resources to suit older teenagers.
- R12** Consider allocating additional resources to **allow for additional *Food Sensations* school visits per year**. This could include a specific allocation to support schools that have adopted a 'Health Promoting Schools Framework'.
- R13** Consider allocating additional resources on a fixed or short term basis to **explore and develop flexible delivery options for *Food Sensations*** including online real time workshops that will increase access to the program, particularly for regional and remote schools.
- R14** Ensure that **continuing professional learning opportunities are provided for new and existing *Food Sensations* staff** to maintain and grow their skills and expertise. This should include cultural competency training and managing/guiding student engagement and behaviour.

## 14. Epilogue: Student Stories

The following vignettes give voice to arguably the most important stakeholder within the SBNEP, the students themselves. In putting it all together, we felt it was important to deepen the story around the lived experience of students who access SBNEP. No matter how detailed, no evaluation report can ever adequately convey the reality of schools', teachers' and students' experiences. These vignettes based on three students from three different schools are an attempt to pull the threads together and allow the reader to draw further conclusions about the impact of the SBNEP on individual students and their school community. Our special thanks go to the students, parents, teachers, school leaders and other staff in the case study schools who kindly agreed to participate in the evaluation.

### 14.1 Michael's Story

#### MICHAEL

'Michael' is a 13-year-old boy living in a remote community in the north of Western Australia. His town is small - there's a general store, a health clinic, a telecentre, some houses and a school. Michael's school has been around for a long time and is a stable part of the local community. Foodbank has been providing breakfasts at the school for more than a decade.

The School Breakfast Program operates 5 days a week at Michael's school, and he goes every day. Everyone was up late last night, and there wasn't anything much left to eat at home. Michael knows he will be able to get something to eat at school. Michael catches the school bus when it comes by his house – the first school siren has just sounded and so he knows the school bus will be around soon. Each morning for breakfast at school Michael has toast, baked beans and orange juice, and afterwards helps to clean up the dishes.

When Michael is not hungry, he says he feels "just right", and that's when he says it's easier to feel calm at school, manage his feelings, emotions and reactions to things, and he can understand how others are feeling, too. It's easier to do work and listen to the teacher, since he's not worrying about food. He also thinks that he has learnt a lot from going to Breakfast Club, like how important it is to wash your hands before eating or cooking, how to use the 'things' in the kitchen, good table manners, and how to choose healthy foods to eat. At home, he likes to cook eggs for his family.

Michael says he really likes going to Breakfast Club because he gets to see his friends there every day, and it makes school a good place to be. Having breakfast at school makes Michael want to come to school, and helps him to be on time in the morning. He goes to class feeling ready to learn and able to concentrate in class. Michael's teacher agrees – he has attended school four out of five days per week this year and has steadily improved his attitudes and behaviours in the classroom over the last two years as well. Michael really benefits from having breakfast at school, and his teacher has really noticed that Michael is more engaged and productive in the classroom after having a good breakfast. Michael says that Breakfast Club helps him to get his work done in class and get along well with the other kids, as well as behave

properly at school. He sees Breakfast Club as a good thing to come to every day – it keeps ‘your engine full’ and helps you to ‘try your best’ at school.

### **The Community**

Every morning, two women from the local community get up early and head to the local school. They are employed by the school to work in the kitchen to prepare and serve breakfast, recess and lunch for the students. The women consider this important work, as many of the children come to school having eaten very little the night before, other than tea and damper, and would not have eaten breakfast before coming to school. In fact, for many of the kids in town, the only regular meals they get are at school. Fresh food is very expensive in the general store, and visits to a larger town for shopping means a few hours of driving each way. Foodbank’s SBP is essential in providing the basic ingredients for the daily feeding program, while the school itself funds the fresh fruit for recess and the meat and vegetables for lunch every day.

### **The Principal**

There’s a fair bit of logistics to get the Foodbank stock here. We probably do round about 30 breakfasts each day, five days a week. We also provide recess and a cooked lunch daily. The kids are pretty good – they know the routine – and some of the older kids will help out. After breakfast the kids are in class, engaged and switched on. Breakfast Club is one of those things that is always present, so our school day starts with the kids getting picked up on the bus. The last thing we say is, “Make sure you go and get some breakfast if you haven’t had any’. Sometimes parents will say to me, ‘Oh, so-and-so hasn’t had breakfast’ so we encourage all the kids to make a start and go and have something to eat.

Foodbank is really good. They organize the stock to go to a business in our nearest big town, and then the stock gets brought in and we’ve got storage capacity here to keep it. We supply a bit of bread and other things like that, and we’re happy to meet those costs. Feeding kids is a really important part of what we do and the contribution that Foodbank makes is really important.

We know that if kids don’t have a feed then the day is just very long and very hard until they get their lunch. If they’re worried, and that’s the expression they use - ‘worried about food’, that’s all they think about so they’re not working, they can’t concentrate and that learning time is lost. From our point of view, if we can make sure everybody is fed then we’ve got a good chance of getting some learning done.

### **The Health Professional**

The main benefit for these kids is the stability of Breakfast Club. It’s a safe place where they know they can come, and it’s a big part of setting up for the day. So you see a lot of benefits to their behaviour in that. The students also connect with the school staff and make really positive relationships, and staff are seen as people who are there to help. Because all the kids can go to Breakfast Club the shame of having no food sort of gets removed. It’s also a time when we can find out what’s going on at home or in the community, since the kids see the staff as helpful and have a strong reliance on Breakfast Club to be there every day.

## 14.2 Leah's Story

### LEAH

"Leah" is a 9-year-old girl living in Perth. She lives in a busy part of the city, and her school has a lot of children from different ethnic backgrounds. Leah's school is an important part of the local community and has been providing school breakfasts through Foodbank WA for many years.

The School Breakfast Program operates three days a week at Leah's school. Her family don't have a reliable car so they have a long walk to school every day. By the time Leah gets to school she is really hungry and looking forward to Breakfast Club. Getting up early and helping mum get her little brothers ready for school means Leah didn't have time for breakfast today.

At school, Leah finds one of her friends to sit with at Breakfast Club while her mum settles her brothers and chats with other parents and a teacher. After breakfast, Leah heads to her classroom to start the school day. Last week, the *Foods Sensations* ladies came to school. Leah says the session improved her knowledge about choosing healthy foods and gave her quite a lot of new skills about preparing healthy meals. She really wants to eat more healthy foods and practice handling food safely in the kitchen - like she learnt in *Food Sensations*. Leah says she really enjoyed the session, and can't wait to try another one.

As Leah settles at her desk, she feels ready to learn and concentrate in class, and is confident she will be able to get her work done today. Her teacher agrees, since Leah's attendance is always over 96% each term and her classroom behaviour, productivity and engagement in class activities are always at the highest level. Leah loves going to Breakfast Club and believes very much that Breakfast Club makes her feel like a part of her school, making school a good place to be.

### The Principal

Through Foodbank, so much of the stock and those we buy, produce a quite comprehensive array of breakfast items that are provided each day from cereals to toast, to some hot breakfasts every now and again, juices, and the like. So, in that respect the School Breakfast Program is quite positive, and really embraced by a lot of the staff here. The Foodbank stock is pretty good in terms of that there's fruits on cereals, and wholegrain toast, and multigrain, and all those sorts of things. We have the Breakfast Club three times a week - Monday, Wednesday, and Friday. It is generally run by staff here at the school, and that's a combination of teaching staff coordinating it, and Education Assistants that come in just a little bit later in the morning.

The SBP is really promoted in the community just as an opportunity for the kids to come along. We realise the value of good nutrition, and modelling of good nutrition, and things like that, but in terms of the community, it's as much as to come in, enjoy, have a bit of social interaction with each other, and those other messages just happen by osmosis. We know that in our community, nutrition is not always high for some families, so it's about as much about providing that opportunity for them, and to ease that pressure without us placing the judgement on whether they've been fed at home, or not being fed properly, and things like



that. So, it's really just promoted as a community program, and its 'everyone come along' - so that's been the main emphasis of it.

An important aspect is that as much as we want kids to be at the optimum for when they go to class in terms of what they've eaten and all that, we have a strong focus around the modelling of this as to what a good healthy breakfast would look like in the morning. For a lot of families, and a lot of kids, it's just a great way to start the school day. Some of them had breakfast at home and are coming in and being part of it, in terms of building the school community spirit and school culture. It's something we categorically need in this type of school and it can be a start of the conversation with some families about other things, you know, - if we do some emergency food hampers, or if we do some lunch stuff, emergency lunches, and all that, this is the program that kicks it all off - it's one of our key pastoral care programs.

### **The Teacher**

We recently had the *Food Sensations* team at the school. The session was extremely well organised. The team brought the food, they had their recipes, they took ownership of the class, which was wonderful. We, of course, as classroom teachers, were there to assist. Each group of students was allocated a particular dish, and when the children finished cooking we all celebrated the fact, and we shared our food amongst all of us, no matter who had made what and we had lunch together, so it was wonderful. Highly engaging, the children loved it, it was meaningful learning in respect to the children who were very involved. The children took great, great happiness in coming for the next three, four weeks, telling me what they tried to cook for their family, and how they weren't allowed to touch the utensils, but mum used the knife. So I felt it extended past that day, and past that learning moment, where they were talking about, "What else can I do?" and then we moved on to, "How can we help around the house?" but the healthy eating, well, they had their recipes, and I even had parents coming to ask me, "Is there any other recipes that we can get our hands on?" which is something else I'd like to add, because they have extra resources on their website.

At a class level, the SBP also has a huge impact. We have quite a few kids who will come with a minimal, or no breakfast, and for them, having the option of walking in without the stigma, without having to go and physically ask someone, or tell someone - they can just come in and have something to eat with their friends. There's no stigma attached, since everyone's having a good time and there's parents that come in, so for them, it's great because it means that they're actually accessing food, which some of those students wouldn't necessarily ask us, or tell us, sometimes. And in terms of their learning, they're more focused, they're more alert, since basic needs are met, whereas if they weren't being fed, they'd be sitting there with a hungry tummy and getting grumpy, and not learning.

At a school level, I'd say probably it gives more of a sense of community, for parents as well. They're welcome to come in - and we do get parents that come in with the kids - and they'll come in and have a chat with people who are serving, you know, because I'm just in a classroom next door to the breakfast club, but I'll walk through and say good morning to everyone so it's quite a social event as well.

### The Parent

School Breakfast just helps the kids, because a lot of kids in the school that have to travel. And that's one of the big things, that means the kids have to get up really, really early to be able to have breakfast so the kids can come here, have breakfast, and then go straight off to class, and at least they're getting something in the mornings, which is really good for my lot, because they need it. That way, the kids are not going to be hungry as they go into class, and they've got a full belly so they're going to concentrate - it just sets them up for the rest of the day.

I think the teachers, and the volunteers really help. They encourage the kids to come along, which is really good, so you get quite a lot of kids. I think Breakfast Club should be five days - it would be a lot better because then I don't have to get up so early on the two other days to rush to get them off because we've got to walk about 25 minutes each day. Breakfast Club also helps with a sense of community, because the students all interact with each other and because they might have to sit with someone else on a different table that's not their friend, so they're all going to be sitting there talking to each other. They talk to the teachers, and it helps them all to interact with each other, so it's a really good thing.

## 14.3 Jai's Story

### JAI

"Jai" is a 15-year old boy living in a regional town in WA. His town has a population of around 4,000 people, and has a primary and secondary school, medical services and hospital, a shopping centre, a post office and relies on mining, tourism and agriculture for income. Jai's school is an important part of the community and has links with local employers for job-ready training and apprenticeships. Foodbank has been providing breakfasts at the school for several years.

The School Breakfast Program operates 5 days a week at Jai's school., and he goes two or three times a week. When he gets to school, Jai helps set up the tables, and then grabs some food, sits down and has a talk with his mates and the staff. Jai has medication to take, so he says that having breakfast at school really helps with that, as well as getting to school on time. Tuesdays and Thursdays when a cooked breakfast is served after sports are his favourite days.

After breakfast, Jai heads over to the school and to his classroom. His teacher asks him if he has eaten today - and he has - so he is ready to start the day. While not really making him want to come to school, Jai feels that School Breakfast helps him quite a lot to be on time for school and to class during the day, and feeling somewhat ready to learn. He says that having a good breakfast helps him to behave and concentrate in class quite a lot. Jai also says that it helps him learn to get along with others and really makes a difference to him feeling healthy and active. Jai's teacher is happy with the progress he is making – he has been at school nearly full time this year as compared to previous years when he would regularly skip school.

Jai says he has learnt a lot from the *Food Sensations* people who came to his school. He knows that many foods contain too much sugar, and that 'Superhero Foods' are better for you than

'Zombie Foods' like pizza and donuts. He says that "fruit and veg helps you, like, get more energy and that, instead of chocolate because it gives you a big sugar rush and you got no energy for the rest of the day". Jai very much enjoys spending time with the other students at Breakfast Club and thinks that the School Breakfast Program helps make school a good place to be quite a lot of the time, also helping him make friends and getting to know the teachers.

### **The Principal**

The school administration sends out the emails and collates the paperwork for our Foodbank order and it magically appears on our doorstep in about week one or two of the term. We provide breakfast 5 days per week here. We run early morning training sessions on Tuesdays and Thursdays, so we'll have a cooked breakfast afterwards, and this usually includes toasted sandwiches, eggs, bacon, omelettes or some variation of that, plus milk and juice and the usual cereals, toast, baked beans and spaghetti. On the other days, the Foodbank produce is available for any kids who turns up to school and hasn't eaten that day or the night before. We keep the Foodbank produce available all day too, for any child who hasn't had breakfast, doesn't have lunch, or if they're a bit unsettled during class, and they can have access to that during class time. The teacher will send them down to us where they can get something to eat.

The School Breakfast Program has been in the school for quite a while. It's something we want to continue because it's a valuable thing to do – making sure the kids have got a full belly before going into the classroom – because it affects the way that the brain functions and is going to improve their cognition in the classroom. The students are also going to be a bit more emotionally stable, happier and more content. It's better than the lollies and junk the kids are turning up to school with. We also work with other organisations in town on a school attendance strategy. The more the kids are attending school, the less crime there is, so the SBP helps keep kids engaged so they're not doing those things.

We do notice that on the days the kids have had breakfast they are usually a lot more settled, stay seated in class, use their manners and that sort of thing, so they're pretty switched on. I guess an indication is when a student comes down here for food, then goes back to class, they're re-engaging in class and not coming back to us again, so that sort of speaks for the value of having something in their belly.

### **The SBP Coordinator**

Certainly, having the stock delivered here and stored here means it's readily accessible. It's pretty easy to have the program at the school, because there are four staff who can organise the breakfast each day – it's part of their job. We don't have any volunteers or family members who help out, so one staff member comes in and does all the preparation for that day. It would be hard to rely on volunteers putting up their hand to come in super early if you were going to run it without dedicated staff.

Running the SBP is a really good way to build relationships with the kids. If there is any kid who is a little bit unsettled during the day, you can have a bit of an extra chat them and make sure they're going into the classroom a little bit more calmly, I guess. And we also get a chance to discuss a little bit of nutrition and some table manners and etiquette. We get the kids to help, and there's an expectation that everything is clean and tidy and that sort of thing – a bit of

ownership and responsibility. The School Breakfast Program is a good incentive for them to come to school.

**The Teacher**

Having Foodbank at this school means there's always food available. There's a few kids who you can see they might not have had breakfast, so you go and make sure: "Hey, have you eaten brekkie? Alright, come and eat." I can call down and say, "Can you grab Jai – he said he hasn't had any breakfast" and the staff come and get him, make sure he has a good feed and then bring him back to class. It really helps the classroom teacher to make sure those kids are ready to go for the day. There's a few specific kids that you will go and ask because you know their behaviour is going to be pretty bad if they haven't eaten – it happens fairly regularly. We work with the breakfast staff to make sure they get something to eat in the morning, and at lunch if they need it. It's good that we always have food for them so they can concentrate at school and it sets them up for a better day.

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