

Executive Summary of the June 2008 Progress Report for the Evaluation of the Stephanie Alexander Kitchen Garden Project

Background

The Stephanie Alexander Kitchen Garden Program (SAKGP) is an innovative school-based program that offers children in primary school the opportunity to grow, harvest, prepare and share fresh, nutritious, seasonal and delicious food. The objective of the program is to provide a pleasurable experience that will positively influence children's food choices, attitudes towards environmental sustainability and working relationships with other children and adults.

A mixed-methods longitudinal evaluation is being conducted by researchers at Melbourne and Deakin Universities to assess the impact the SAKGP is having on school communities and participating students. A wide range of both quantitative and qualitative data is being collected from six Victorian primary schools that are participating in the program as well as from six matched comparison schools. The evaluation is being conducted over a two and a half year period to assess change over time with a particular focus on the following key indicators:

- Development of children's knowledge and confidence in the growing, harvesting, preparation and cooking of food.
- Expansion of children's appreciation, enjoyment and ability to describe a wide range of fresh, seasonal foods and dishes.
- Creation of an enjoyable learning environment that promotes positive self esteem, cooperative behaviour, and enhanced academic outcomes.
- Development of awareness and understanding of issues of environmental sustainability and links between the garden and preparation/consumption of food.

The evaluation is also intended to provide additional input into the guidelines for extending the Kitchen Garden Program to other Australian primary schools and includes an economic appraisal of the program.

This summary represents the findings of the evaluation at the completion of baseline data collection based on principal interviews, questionnaires completed by children, teachers and parents and observation of kitchen and

garden classes. It provides a brief overview of the profiles of participating schools, families and children along with their expectations and early experiences of the program.

School Profiles

The schools taking part in this evaluation represent a wide range of demographic and geographic characteristics with profiles of the program schools closely matching those of their paired comparison schools. Interviews with school principals revealed a range of expectations and experiences of cooking and gardening programs that particularly emphasised their potential to enhance student and community engagement with the school. Improving attitudes and knowledge of children and their families regarding health and nutrition was also an important motivation for some schools to become involved with the program. It is noteworthy that all of the comparison schools had their own current or planned gardening programs, which provided their motivation for taking part in the evaluation. Follow up data will enable us to identify the unique impact of the SAKGP, when compared with these less comprehensive and more varied models.

Teachers gave very positive responses to questions about morale, satisfaction and cooperative effort amongst staff, indicating that both the program and comparison schools in this study provide a satisfying work environment for their teachers. This evaluation cannot comment on whether this reflects a general pattern in Victorian schools. However, it is certainly possible that those schools which have taken on the Stephanie Alexander Kitchen Garden Program, as well as the comparison schools that have been prepared to take part in this research, represent particularly dynamic school environments, reflected in the attitudes of their teaching staff.

Staff also indicated that student behaviour and enthusiasm for school were generally good, though the numbers strongly agreeing with the statements: students look forward to coming to school; students pay attention during class; and student social behaviour is good; were only between 30 and 60%. Follow-up data may show whether the program, during the early years of its implementation, has an impact on these measures, as well as on absenteeism and punctuality, mentioned as particular issues for some schools.

Responses to questions regarding school sense of community were generally positive. However, just over 20% more of the teachers in the program schools than the comparison schools strongly agreed that the community supported their goals and activities. This may be a direct indication of the enthusiasm generated by their recent introduction and launch of the SAKGP.

Student Profile

Child questionnaires were used to explore children's range and sophistication of food choices, food literacy, confidence in cooking and gardening skills, cooking and gardening knowledge and self-assessed wellbeing. Their responses placed over 50% of the children from both program and comparison schools in the "limited eater" category. The most commonly listed favourite foods had simple ingredients and flavours, such as pasta, chicken and potatoes. Almost 20% of children listed only take-away foods amongst their favourite savoury foods. Questions designed to assess food literacy elicited similarly limited responses. Baseline data showed only 11% of program school children and 8% of comparison school children providing a "clear" or "sophisticated description" of their favourite foods.

Asked to list evening meals they felt confident about cooking on their own, most children displayed, "limited/unclear" or "no" knowledge about cooking. However, 10% more children from the comparison schools than the program schools (28.9% and 18.1% respectively) gave answers that were coded as displaying "basic" or "skilled" knowledge at baseline. When assessed on gardening knowledge, children from both the program and comparison schools demonstrated good understanding of composting, organic gardening, watering techniques and tomato harvesting but little knowledge of seasonal produce or when to harvest sunflowers or potatoes. Very few children from either group of schools had any knowledge of companion planting.

Children's self assessments regarding wellbeing showed that most children from both program and comparison schools were generally positive about the way they feel.

Home Profile

Answers to parent questionnaires indicated that 88% of children from both the program and comparison schools in this study at least sometimes requested new foods which didn't include snacks. Almost all parents also reported that they responded to these requests by involving children in food choice at least sometimes. Follow up data will indicate whether children's interest in new foods and subsequent involvement in family food purchases is affected by participation in the program.

Questions about children's eating behaviours at home revealed a less than optimum picture. On the positive side, according to parent report, over 90% of children are eating home-prepared evening meals on most days and almost all children are consuming at least the minimum recommended one serve of fruit every day. However, more than half the parents surveyed indicated that their children were eating less than the recommended minimum of 3 to 5 serves of vegetables daily. In addition, over 70% of children from both program and comparison schools are drinking cordials, fruit juices or soft

drinks every day with approximately a third consuming more than 2 glasses every day.

Combined Measures

Over 90% of parents and children from both program and comparison schools reported that children helped with cooking and gardening at least “sometimes”. Children, however, were more likely than parents to describe their level of participation as being “often” or “always”.

Children’s answers to questions about enjoyment of cooking and gardening revealed general enthusiasm for these activities, with over 80% of children from both program and comparison schools indicating that they enjoyed cooking either “a fair bit” or “a lot”. For gardening, these figures were 76% and 66% respectively. This higher reported level of enjoyment amongst program school children may reflect their early experiences of the Stephanie Alexander Kitchen Garden Program.

The figures suggest that parents considerably underestimate their children’s levels of enjoyment in both cooking and gardening and find these activities somewhat less enjoyable themselves, when their children are involved. If the program has the effect of increasing children’s knowledge, skills and literacy in these areas, it is also possible that it may impact on these findings.

There was little difference between program and comparison schools when it came to children’s willingness to try new foods, with 60% of program school children and 58% of comparison school children indicating that they were willing to try a new food they had never tried before “often” or “always”. Answers from the parents gave this assessment in 52% and 55% of cases respectively. Follow up data will show whether the program has had an impact on this measure.

Although teachers, parents and children all rated child cooperative behaviour positively, teachers were consistently less positive than parents or children. This was also a measure where there was a difference at baseline data collection between comparison and program school teachers. Teachers from comparison schools were 10 and 15% more likely, compared with program schools, to answer “always” when asked whether children work well in a group or whether they do what they are supposed to do in a group.

Observation of Kitchen and Garden Classes

Participant observation has so far been conducted twice, at baseline and again approximately one year later, at four of the participating schools with the Stephanie Alexander Kitchen Garden Program. During the first round of observation all of the schools were clearly highly enthusiastic about the SAKGP and considered it an asset to their students and the wider school community. While there were clear program parameters, the culture,

resources and individual creativity of the staff and students have played a significant role in determining how the SAKGP has unfolded in each of the schools observed. The result is that the program has a distinct 'flavour' at each school.

The kitchen and garden classes succeeded in engaging all of the observed children most of the time, despite dealing with challenges such as drought, extreme heat and resource constraints as well as catering for cultural diversity and behavioural issues. Children appeared to be encountering a broader range of raw produce and meals cooked 'from scratch' than they might otherwise have done at home, with the potential for positive impact on their future food choices and appreciation.

In the course of the second round of observation not one of the schools was able to proffer a disadvantage or regret in participating in the SAKGP, despite time constraints and a range of financial and environmental challenges. At all schools visited, the children continued to engage very well with kitchen and garden classes. Teachers and helpers unanimously confirmed that the SAKGP program enlivens, enriches and educates the children (and the teachers) and offers an alternative opportunity to excel for children who perform less well in a traditional classroom environment or who require additional assistance with life skills.

Conclusion

Comparative data shows that the program and comparison schools are closely matched in terms of demographic characteristics as well as most of the areas being assessed, which will allow follow up data, to be collected in the second year of program school participation, to show the effects that the program has had on these measures.

The results show that schools have high expectations of the anticipated benefits of the program. School principals were particularly enthusiastic about the potential to improve student engagement with learning. It was expected that the program would be especially effective in enriching experiences for children who were less academically able and who had difficulties fitting in with usual classroom expectations. Improved student engagement was seen as a precursor for improved behaviours and learning outcomes. The opportunities represented by the program for enhancing community connections were also highlighted by all principals. This included raising the profile of the school within the local community as well as broadening opportunities for parents and other volunteers to take part in school activities and have contact with the children and staff. Anticipated improvements in child knowledge and behaviours associated with healthy nutrition were also emphasised by some schools.

Children's responses to questions about enjoyment and participation in cooking and gardening showed a high level of enthusiasm for these activities. Children were also keen to be involved in food purchasing decisions and

willing to try new foods at least sometimes. Despite this, baseline data indicates that most of the children involved in the evaluation were characterised as “limited eaters” when it came to food choices and also displayed limited “food literacy” when talking about their favourite foods. In addition, the majority of children are consuming fewer than the recommended number of serves of vegetables and many are drinking greater than recommended quantities of sugary drinks. Children displayed a range of levels regarding skills and knowledge of cooking and gardening, though most were categorised as basic or limited. There is clearly potential here for the program to capitalise on children’s enthusiasm and interest in leading them towards a more varied, nutritious and sophisticated relationship to food.

Early indications from the participant observations suggest that many of the schools’ expectations of the program are being met. Even those children described as disruptive or disengaged from classroom activities are participating eagerly in the kitchen and garden classes. Children’s skills appear already to have improved and they are happy to try new and nutritious foods. Each school community and its staff are finding ways to incorporate the program that work for their particular needs and environment. Examples of Vietnamese helpers participating in a kitchen class and School Principal reports of local aged care facility residents and adults with disabilities also volunteering, suggests positive social opportunities are being provided which extend beyond narrow definitions of a school community. Early concerns expressed by principals about the difficulty of recruiting volunteers and finding sufficient resources did not appear to have affected the running of the program at this stage.

The next round of data collection will enable many of the outcomes of program participation to be evaluated. Of course, some anticipated outcomes may not become apparent for many years: examples include potential for improved school retention rates as well as the knowledge and skills that children will take with them when they leave school and set up their own homes. However, it is already apparent from the enthusiasm for the program and the engagement of children, schools and their communities, that the program is providing valuable experiences for all concerned.