This is the authors' final peer reviewed (post print) version of the item published as:


Available from Deakin Research Online:

http://hdl.handle.net/10536/DRO/DU:30077408

Reproduced with the kind permission of the copyright owner.

Copyright : 2015, Emerald Group Publishing
Promoting appreciation of cultural diversity and inclusion with the Stephanie Alexander Kitchen Garden Program
Karen Block and Lisa Gibbs
Jack Brockhoff Child Health and Wellbeing Program, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia
Susie Macfarlane
School of Exercise and Nutrition Sciences, Deakin University, Melbourne, Australia, and
Mardie Townsend
School of Health and Social Development, Deakin University, Melbourne, Australia

Abstract

Purpose – The purpose of this paper is to present emergent findings from an evaluation of the Stephanie Alexander Kitchen Garden (SAKG) Program showing that the program promoted appreciation of cultural diversity and inclusion of culturally diverse groups.

Design/methodology/approach – The findings reported here are from the qualitative component of a mixed-method, nonrandomized, pre- and post-comparison evaluation study. Focus groups and interviews were held with school principals, teachers, program specialist staff, parents, volunteers and children at the program schools.

Findings – In a culturally diverse school, the program enhanced the school’s capacity to engage and include children and families from migrant backgrounds. In less diverse settings, the program provided opportunities for schools to teach children about cultural diversity.

Research limitations/implications – Assessing the program’s impact on multicultural education was not a specific objective of this study, rather these findings emerged as an unanticipated outcome during interviews and focus groups that explored participants’ views on important changes to schools associated with the program. Thus, the quantitative component of the evaluation did not assess the extent of this program impact and further research is recommended.

Practical implications – The program may have particular value in culturally diverse schools, providing benefits in terms of engagement of children and families and potentially, in the longer term, associated improvements in learning outcomes.

Social implications – These findings suggest that the program can help to promote social equity and inclusion for culturally diverse groups.

Originality/value – This paper highlights critical equity implications associated with school-based programs’ capacity to include culturally and linguistically diverse groups.

Keywords Children, Intercultural, Social inclusion, Ethnicity, Families, Multicultural education, Equity, Kitchen gardens, Cultural diversity

Paper type Case study

Introduction

School-based programs that do not address cultural diversity risk widening social and health inequities. In an era of high migration, with global increases in population diversity in developed countries (Daunt, 2003), it is critical that programs are culturally inclusive. Recognition of the positive contributions of people from culturally and linguistically diverse
(CALD) backgrounds is also critical to promoting social inclusion, and there is some, albeit scant, evidence that cooking gardens can support appreciation of other cultures and their foods (Lautenschlager and Smith, 2007). This paper builds on this evidence by presenting emergent findings from an evaluation of the Stephanie Alexander Kitchen Garden (SAKG) Program relating to cultural diversity and inclusion.

The SAKG Program is currently being conducted in over 700 primary (elementary) schools across Australia, and expansion of the program continues in communities with a wide variety of socioeconomic and cultural characteristics (Stephanie Alexander Kitchen Garden Foundation). Conceived by Australian chef and food writer Stephanie Alexander, it is an innovative gardening and cooking program aimed at providing children with a pleasurable introduction to food education through growing, harvesting, preparing and sharing fresh, seasonal, healthy and delicious food. Children in grades 3-6 (ages 8-12) participate in a 45-minute garden class and a 1.5-hour kitchen class using fresh produce from the garden to create different multi-course meals each week as an ongoing part of the school curriculum. An important aspect of the kitchen garden program is that it engages parents and members of the local community in volunteering roles and activities (Townsend et al., 2012). The program emphasizes “hands-on”, experiential learning and also models appropriate behavior associated with consuming food as children, program staff, teachers and volunteers sit down together at the end of the class to enjoy the food they have prepared.

The positive impact of the SAKG Program on children’s willingness to try new foods; cooking and gardening knowledge; and student engagement, confidence and connectedness has been reported elsewhere (Block et al., 2012; Gibbs et al., 2013a; Staiger et al., Under Review). This paper highlights additional emergent findings from the qualitative data that the program also has the capacity to promote cultural diversity and inclusion.

**Theoretical framework**

Although the SAKG Program was developed without explicit reference to a theoretical model, the research team identified multiple aligned theoretical frameworks relevant to the evaluation (Gibbs et al., 2013b). These included principles of effective health promotion, which require the combined elements of policy, environment, community, personal and service elements to be addressed (World Health Organization, 1986), and social-ecological theory, which recognizes the interdependence between individuals and their physical and social environment (Bronfenbrenner, 1979; McLaren and Hawe, 2005; Ozer, 2007). These frameworks provide a rationale for exploring the impacts of the program on multiple domains for individuals, schools, families and communities, and the way in which these domains connect and interact. A social-ecological conceptual model of the potential effects of school gardens, developed by Ozer (2007), distinguishes a wide range of proximal and distal effects of different program components relevant to the analysis presented here. These include individual proximal effects on student’s knowledge of different foods and nutrition; effects on social relationships, which form part of the “micro-level” of a social-ecological model; and “meso-level proximal and distal effects on parent and family engagement in schooling”.

**Methods**

A mixed-methods, nonrandomized, pre- and post-comparison study design was used to evaluate the impact of the SAKG Program over a 2.5-year period (2006-2009), involving six program schools and six matched comparison schools. At the time of the evaluation, the
program was running in 20 government-funded primary schools in Victoria. Since then, it has been expanded considerably to include over 700 schools across Australia by mid-2014. Participating schools were selected to represent a range of characteristics in terms of urban or rural location, size and socioeconomic status. During the data collection period, 764 children, 562 parents, 93 teachers and 17 volunteers participated in the survey component of the evaluation and/or semi-structured interviews and focus groups. Qualitative methods explored children’s, parents’, teachers’ and volunteers’ experiences of the program and any associated changes to the school culture and learning environment. The quantitative survey assessed the extent of changes to children’s willingness to try new foods along with confidence and knowledge concerning cooking and gardening activities. Further details of the qualitative component of the evaluation relevant to this paper are described below, while a full description of the evaluation methodology has been published elsewhere (Gibbs et al., 2013b).

Semi-structured focus group discussions were held with sample groups of teachers (n = 26), parents (n = 20) and volunteers (n = 17) at two rural and two urban program schools, and with 124 children in 12 focus groups at the 6 participating program schools. All teachers associated with classes involved in the program were invited to participate. Parents and volunteers were recruited through school newsletters and letters sent home by the school. Child focus groups were mixed-gender and comprised one group of grade 3 and 4 children (aged 8 to 10) and one group of grade 5 and 6 children (aged 10 to 12) at each school.

Teachers were asked to select as participants, children who would represent a range of experiences of the program. All kitchen and garden specialist staff also participated in the interviews as did the principals from all 12 schools.

The first author was present at all focus groups and interviews, with the majority also attended by the second author. A parent focus group in one school was held with Vietnamese-speaking parents and was co-facilitated by an interpreter. Focus group and interview prompts were open-ended, exploring expectations and experiences of the program, facilitators and barriers to program implementation and participation, changes to the school and home environment and participant perceptions of the most important program outcomes. Transcripts were coded using QSR NVivo 8 as a data management tool and an inductive thematic analysis was performed with cross-checking of analyses and interpretation between the two authors who conducted the interviews.

Ethics approval for the evaluation was obtained from the University of Melbourne, Deakin University and the Victorian Department of Education and Early Childhood Development.

**Results**

Overall, participants in the SAKG evaluation study demonstrated relatively low levels of cultural diversity within participating schools, with 84 per cent of parent questionnaire respondents born in Australia or New Zealand and 96 per cent reporting that English was the main language spoken at home. One of the urban program schools, however, was highly diverse, including children born in African countries and a large number with Vietnamese backgrounds. The parent focus group held at this school was conducted with the aid of an interpreter and comprised 13 Vietnamese-speaking parents with low levels of English proficiency (12 females and one male).

Although evaluating the program’s impact on multicultural education was not a specific objective of the broader study, interview and focus group prompts were designed to elicit a range of perspectives on program outcomes, including those that may have been
unanticipated. Accordingly, the qualitative findings presented here showed that in both diverse and mono-cultural contexts, schools harnessed the SAKG Program to promote cultural diversity and inclusion in a number of ways. 

Key themes identified in the data were that: 

- Program schools engaged families from culturally diverse communities by providing new opportunities for them to be actively involved in school activities.
- Schools adjusted aspects of the program to reflect the diversity of cultures within the school or conversely to introduce children to concepts of cultural diversity.
- There was also evidence of positive experiences of children’s transfer of cooking skills to the home environment, even when this challenged socio-culturally constructed gender roles within families.

The first section below presents findings from a participating school with high levels of cultural diversity. The following section considers the interview and focus group data relevant to this topic from schools with less culturally diverse populations.

Enhancing opportunities for engagement and inclusion of diverse cultural groups

In the culturally diverse school, the principal, teachers and specialist staff described several aspects of the program that facilitated the meaningful engagement and inclusion of all children and families. Teachers were particularly enthusiastic about the way in which the experiential learning environment benefited students’ oral language development – especially for those children learning English as a second language. In the kitchen classes, tables were regularly set with chopsticks as well as knives and forks and students of all backgrounds readily used both – and discussed alternative cultural practices such as eating with one’s hands.

The school principal reported that many migrant parents, who were not confident in English and had typically not previously been involved in classroom academic programs, regularly volunteered to assist with the kitchen and garden classes. The kitchen specialist described how the Vietnamese mothers brought their own skills to the kitchen classes and, in turn, asked her to teach them “traditional Australian” recipes. This increased level of engagement by CALD parents was highly valued by the school and recognized as beneficial for the school community as a whole, student learning outcomes and the parents themselves. Program-associated benefits such as these mitigated concerns that teachers at this and other participating schools had held when the program was being introduced that it would take up too much time in an already crowded curriculum.

An evaluation focus group held with the aid of an interpreter for Vietnamese-speaking parents at this school revealed that the children often wanted to cook recipes at home that they had tried at school. These parents welcomed the fact that their children were learning about Australian foods and culture too and were introducing new, healthy, locally available foods to their families. Gender role diversity was also an outcome of the project for some of these families. Amid much appreciative laughter, this group (of predominantly mothers) explained that one aspect of this cultural sharing involved their sons – who, “in their culture”, would not usually be expected to cook at home – not only wanting to cook, but also actively encouraging their fathers to do so too!

Providing opportunities for multicultural education in “mono-cultural” settings
The evaluation also included schools from rural and remote communities with low cultural diversity among the student body and local community. Teachers in these schools used the program to introduce new and “exotic” foods and plants and embed learning about other cultures within the broader curriculum. The following excerpts from two separate child focus groups indicate the culturally diverse aspects of learning that the children reported:

- We’ve learned about other countries and their food – India, Morocco, China and France.
- We ask our cooking teacher for the recipes to take home.
- [...] cooking things I like that I’d never heard of!
- We get to use chopsticks for dumplings and wantons.
- (the kitchen specialist) brought back a recipe from Vietnam, rice paper rolls – we made the rice paper from scratch.
- We eat from all different countries in Europe (too).
- We guess which place they have come from with the map (at this point the children got up to indicate a large world map on the wall and point out some of the countries whose food they had experienced).

It was clear from these children’s enthusiastic comments that, beginning with food, they had developed a new appreciation and greater knowledge of diverse cultures and customs facilitated by participation in the program.

According to one group of program volunteers, in addition to teaching about different foods, countries and ethnicities, the SAKG Program provided opportunities for the children to discuss other aspects of diversity, such as religious holidays and dietary requirements associated with different religions and health conditions. A comment from one of these participants perhaps best encapsulated the program’s capacity to promote diversity as: “the children just get more exposure to the different ways of doing things and living”.

Discussion
One of the strengths of qualitative research within an evaluation is that it can capture unanticipated as well as anticipated program outcomes. Previous research into community and school-based gardening and kitchen-garden programs has provided a theoretical rationale (Ozer, 2007) and limited practice-based evidence for a range of positive effects on student engagement and social behaviors (Block et al., 2012; Robinson-O’Brien et al., 2009; Somerset et al., 2005). While there is scant evidence for the impact of such programs on multicultural education, a social-ecological theoretical model predicting impacts of school gardening programs on student knowledge, social relationships and family engagement in schooling suggests that this potential exists (Bronfenbrenner, 1979; McLaren and Hawe, 2005; Ozer, 2007). This evaluation found that participants were enthusiastic about the ways in which the SAKG Program facilitated knowledge and appreciation of cultural diversity in a range of school environments and promoted inclusion and engagement of CALD children and families. The findings indicated that the SAKG Program influenced individual students, their relationships and the broader school community including parents and families, corresponding to multiple levels of an ecological model for understanding individual development (McLeroy et al., 1988). Such models are based on the assumption that these levels interact, and the corresponding implication is that interventions targeting multiple levels are more effective at creating sustainable and positive change (Golden and Earp, 2012).
There is substantial evidence that parental participation in children’s schooling is linked to enhanced social skills and academic achievement and may also be a protective factor for children and adolescents’ engagement in a range of unhealthy behaviors, including alcohol, drug and tobacco use (Berthelsen and Walker, 2008; Centers for Disease Control and Prevention, 2012). The SAKG Program was reported by teachers and one school principal to be an effective aid in the often challenging task of engaging CALD families in school activities. Other research has noted the importance of involving parents in ways that empower them, and suggested that minority parents value education but may be alienated by the school environment; their interactions with teachers are frequently negative and likely to be focused on their children’s problems or misbehavior (Smrekar and Cohen-Vogel, 2001). Part of the appeal of the SAKG Program may have been that it provided a positive environment in which CALD (and other) parents felt able to contribute valued expertise in the tasks at hand.

This finding also suggests that further research is indicated to explore the broader impact of such involvement on families. Vietnamese women reported enjoying being introduced to new recipes for healthy “Australian” food. Given that this school was in a socioeconomically deprived area with an abundance of fast-food outlets, this transfer of skills and knowledge to the home environment may offer significant ongoing health benefits for these families. Moreover, immigrant women can be at particular risk of social exclusion due to low skills in English and poor access to employment (Keleher and Armstrong, 2006; Riggs et al., 2012), and the SAKG Program offered this group of parents an opportunity to participate in the community and build confidence and skills (Townsend et al., 2012).

**Conclusion**

Capacity for culturally inclusive adaptations is a critical equity consideration in school-based programs and for promoting social inclusion of CALD groups. The findings reported here highlight the potential of the SAKG Program to promote awareness of cultural diversity in mono-cultural school communities and positive cross-cultural experiences and inclusion in diverse school communities.

**References**


Centers for Disease Control and Prevention (2012), Parent Engagement: Strategies for Involving Parents in School Health, Department of Health and Human Services, Atlanta, GA.


About the authors
Karen Block is a Research Fellow in the Academic Centre for Health Equity, Melbourne School of Population and Global Health. She is experienced in qualitative methodologies and mixed-methods research in education settings and is currently working on a range of projects involving children and families with a focus on social inclusion, refugee and migrant
populations, evaluating complex interventions and working in collaborative partnerships with the community. Karen Block is the corresponding author and can be contacted at: keblock@unimelb.edu.au
Lisa Gibbs is an Associate Professor and Deputy Director of the Jack Brockhoff Child Health & Wellbeing Program at the University of Melbourne. Lisa is currently managing a range of community-based public health research studies examining social and environmental influences on child and family health and well-being. Her research focuses on engagement of marginalized or disadvantaged groups with an emphasis on community and policy outcomes achieved through University – community – government partnerships.
Susie Macfarlane is an eLearning Education Developer in the School of Exercise and Nutrition Sciences at Deakin University and is interested in inclusive approaches to learning and health behavior change in children and adults.
Mardie Townsend is an Associate Professor in the School of Health and Social Development at Deakin University, Melbourne, where her teaching and research interests include: the human health impacts of contact with the “natural” environment, housing and neighborhoods, the well-being benefits of volunteering and ecological and social sustainability.