Creating Groovy Gardens

Healthy Eating and Physical Activity

Barb Hickling,
DECD
Project Officer, *eat well be active* - Primary schools project
Why gardens as part of a healthy food strategy?

Research shows a clear connection between food choices and cognitive function.

...research supports the broader implementation and investment in effective school nutrition programs that have the potential to improve student access to healthy food choices, diet quality, academic performance, and over the long term health.

Florence, Asbridge, Veuglers, 2008, p. 213
Healthy Eating & Learning

Children fed a diet characterised by high consumption of fruit, vegetables and home prepared foods had higher IQ, verbal IQ and better memory performance at age 4 years

*International Fruit and Vegetable alliance Scientific Newsletter. No 44, April 2010*
What Research says…..

Garden-based nutrition education programs may offer a strategy for increasing fruit and vegetable intake in children.

Children reported high levels of enjoyment in the intervention activities. Most children (97.8%) enjoyed taste-testing fruits and vegetables. Children also liked preparing fruit and vegetable snacks (93.4%), working in their garden (95.6%), and learning about fruits and vegetables (91.3%). Impact data suggest that the intervention led to an increase in the number of fruits and vegetables ever eaten ($P<0.001$), vegetable preferences ($P<0.001$), and fruit and vegetable asking behaviour at home.

A Garden Pilot Project Enhances Fruit and Vegetable Consumption among Children

Stephanie Heim, MPH, RD; Jamie Stang, PhD, MPH, RD; Marjorie Ireland, PhD  June 2009.
More Research

- Improve **attitude toward vegetables and toward fruit and vegetable snacks**

- **Improve nutrition knowledge and vegetable preferences.**

- **Increase children’s knowledge about the benefits of eating fruit and vegetables and participants reported eating healthier snacks.**

- **Increase fruit and vegetable consumption in adolescents.**

- **Contribute to communication of knowledge and emotions, while developing skills that will help them be more successful in school.**

- **Have a positive impact on student achievement and behaviour.**
Research…

- **Significantly increase science achievement scores.**

- **Improve social skills and behavior.**

- **Improve environmental attitudes, especially in younger students.**

- **Instill appreciation and respect for nature that lasts into adulthood.**

- **Improve life skills, including working with groups and self-understanding.**

- **Increase interest in eating fruits and vegetables and improve attitude toward fruits and vegetables.**
Stephanie Alexander says

'Our evaluation confirms that participant students are much more likely to try new foods, develop real skills, work together cooperatively, and that the project itself engages the school communities to a degree that surprises some of the principals.'
Creating Coorara’s Community Garden
Planning the garden

Landscape gardener drew up plan after
• student forum visit to Black Forest
• consultation with staff
• consultation with students

Planning for staged development
Small steps

- Clearing our land
- Laying the pavers
- Putting in garden beds
- Planting
- Next year- irrigation
Next year - Fruit Trees

Student forum met with NRM Education Jeremy Grant to investigate citrus and select fruit trees suitable for our site.
Creating Coorara’s Kaurna Trail
Visioning for Bush Tucker garden

• Beginning small with $1000 “Grow a Great School” grant
• Help to select shrubs, trees, groundcovers from
• Catherine Mossop, Project Officer
  T: 08 8278 0605
  F: 08 8278 0619
  E: info@urbanforest.on.net or catherine.mossop@sa.gov.au
National Tree Day

- Catherine Mossop assisted with location of plants and training the children
- All students went out to help plant
Stage 2

- Winning an NRM Achiever Grant
- Setting up resources for teachers, students and community
- Signage
- Employing an hourly paid instructor to support with resource development

Local resources/ Warraparinga
Local AEC’s
Learning from experience
Resources for Teachers & Children

Folder for teachers
• Dreaming stories
• Activities

Folder with photos for children
• Name
• Photo
• Kaurna medicinal and food uses
Resources

Folder for teachers
• with dreaming stories
• Activities

Folder for children
• Names of plants
• Photos
• Kaurna uses- food and medicinal
Links with Healthy Eating

Coorara Community can’t wait to

• Learn about the plants
• Taste the foods from the Kaurna Trail
• Use them in our shared fruit and vege platters
• Use them in the cooking sessions done with the Healthy Lifestyle parents.
Cross curriculum links - Science

- **Science skills**
  - Investigating
  - Observing
  - Recording
  - Measuring
  - Predicting
  - Testing
  - Comparing
  - Concluding

- **Earth and its Surroundings**
  - Weather
  - Water cycle
  - Soils and geology

- **Living Things**
  - Plant identification
  - Plant growth
  - Plant biology
  - Needs of living things

Life cycles

KidsGrow Garden Links to Learning
Cross curriculum links - Numeracy

- **Basic number operations**
  - Estimating and measuring
    - Length and area
    - Volume and capacity
    - Weight and mass
      - Gathering and organizing data
    - Tallying
    - Graphing
    - Databases

- **Time and space**
  - Area
  - Volume
  - Scale
  - Position
  - 2-dimensional plans
  - 3-dimensional models
  - Timelines

- **Working mathematically**
  - Applying strategies

- **Reasoning**
Cross curriculum links - Literacy

- **Reading**
  - • Research
  - • Seed packet directions
  - • Related fiction
  - • Work of classmates
- **Writing**
  - • Information texts
  - • Research reports
  - • Journal entries
  - • Recording observations
  - • Creative works
  - • Letters of thanks
  - • Requests, invitations
- **Handwriting**
  - • First and final drafts
- **Speaking**
  - • Interviewing
  - • Expressing opinions
  - • Questioning
  - • Restating
  - • Summarising
- **Listening**
  - • Following directions
  - • Understanding sequences
  - • Stories

- KidsGrow Garden Links to Learning
Cross curriculum links - Society and Environment

- **Geographical knowledge**
  - • Natural and built components
  - • School and local environment

- **Geospatial space**
  - • Relationships with places
  - • Mapping school grounds

- **Historical perspectives**
  - • History of gardening
  - • Timeline of school site

- **Reasoning and interpretation**
  - • Hobbies and leisure activities
  - • Past and present data
Cross curriculum links - Arts and crafts

- **Visual**
  - Painting and sketching
  - Graphic symbols
  - Illustrating
  - Gift cards

- **Performance**
  - Singing
  - Rhythms of gardening
  - Instruments from vegetables
  - Drama - role plays
  - Celebration dance

- **Craft**
  - Vegetable dyes
  - Vegetable printing
  - Scarecrow construction
  - Mosaic pavers

KidsGrow Garden Links to Learning
Cross curriculum links - Personal and Social

- **Health**
  - Personal health choices
  - Nutrition education
  - Cooking with plant foods

- **Active Lifestyle**
  - Exercise
  - Outdoor activity

- **Safe Living**
  - Lifting, carrying, digging
  - Safety with tools

- **Personal Development**
  - Self esteem through success

- **Interpersonal Development**
  - Teamwork
  - Co-operative learning
  - Visiting garden businesses

- **Civics and Citizenship**
  - Developing a sense of community
  - Roles, rights, responsibilities
  - Stewardship
  - Community service learning
  - Sharing produce
  - Flowers for seniors
  - Harvest celebration

KidsGrow Garden Links to Learning
Resources-online

NRM Education
http://www.nrmeducation.net.au/
  • General food garden videos
  • Starting and nurturing community gardens
  • From Garden to Kitchen
  • Food and our Carbon Footprint

School Garden Project
• Black Forest Primary School resource DVD for parents and teachers for $10.
  • A short clip from the DVD can be viewed on http://vimeo.com/39532208

South Australia Kitchen Garden Newsletter & Website
• jo.staniforth@sa.gov.au or 8222 9460

SA Botanical Gardens (& trails)
• Michael Yeo (08) 8222-9344

Stephanie Alexander Kitchen Garden Foundation Website
• http://www.kitchengardenfoundation.org.au/

Kidsgrow- Munch and Crunch Garden -Nursery and garden Industry Australia
• http://www.ngia.com.au/MainMenu
Resources – printed

Tools for Teachers - Kitchen Garden Foundation
Growing Community
Starting and Nurturing Community Gardens
Ph: (08) 8371 4622
Freecall: 1800 633 616 (non-metro callers only)
Fax: (08) 8371 4722
Email: info@communitycentressa.asn.au

One Magic Square
by Lolo Houbein
Resources

Your community – families
The students
Local businesses
Foodies
Bunnings
Grants
• Council
• Grow a Great School
• Coles
Key messages

• Research supports the growing and preparation of fruit and vegetables
• Can reduce sedentary behaviours & eat fresh
• Have a vision but start small
• Utilise all your resources
• Link across the curriculum opportunities
• Use a whole school approach
• Have Fun!!!!!!