PENRITH LAKES

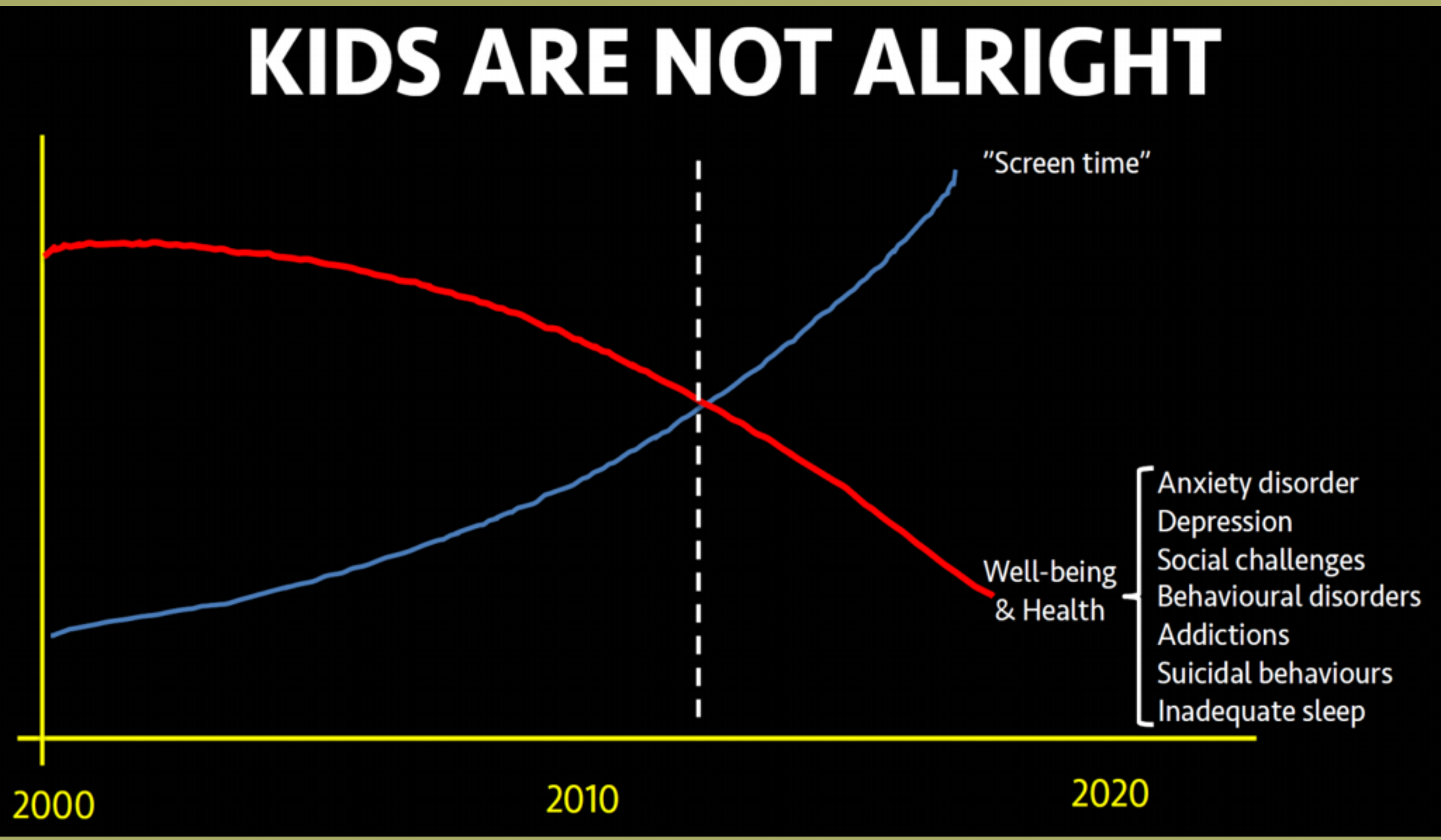
ENVIRONMENTAL EDUCATION CENTRE

EDUCATION FOR A SUSTAINABLE FUTURE

Kitchen Gardens 2020

Empowering for life!

Why Kitchen Gardens?



The ‘WHAT’

Project Aim: To establish a curriculum integrated (Cross-KLA) ‘Kitchen Garden’ program (1-2hrs p/wk) to develop students **educational** and **life** skills, utilising PLEEC’s ongoing ‘face to face’ staff support.

Not an ‘add on’ but **timetabled** into the regular curriculum (1-2hr p/wk) with an alternating Kitchen & Garden lesson schedule all year.

A **TPL** day per semester/project via MyPL to facilitate staff collaboration.

Measurably increase student engagement and achievement of:

- Cross-KLA syllabus outcomes and sustainability (LAC); (research shows **stronger** student engagement & learning through collaborative 'real world' cross-KLA pedagogy);
- General Capabilities, including **Literacy & Numeracy**, Personal & Social Responsibility, Critical & Creative Thinking;
- '**Wellbeing Framework'**, including achievement, meaningful goals and enjoyment of learning.
- Other targets, such **Healthy Canteens**, SEF and NESA APSFT, NSW Health.
- Greater **community** engagement & school attraction value.

School Research Evidence

Public Schools NSW

Kitchen Garden Pilot program

Evaluation Report

NSW GOVERNMENT Education & Communities

Public Schools NSW

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Report submitted to Defra

Food Growing Activities in Schools

Julie Nelson
Kerry Martin
Jane Nicholas
Claire Easton
Gill Featherstone

November 2011

Evaluation of the Stephanie Alexander Kitchen Garden Program

Kitchen Gardens

Learning resources

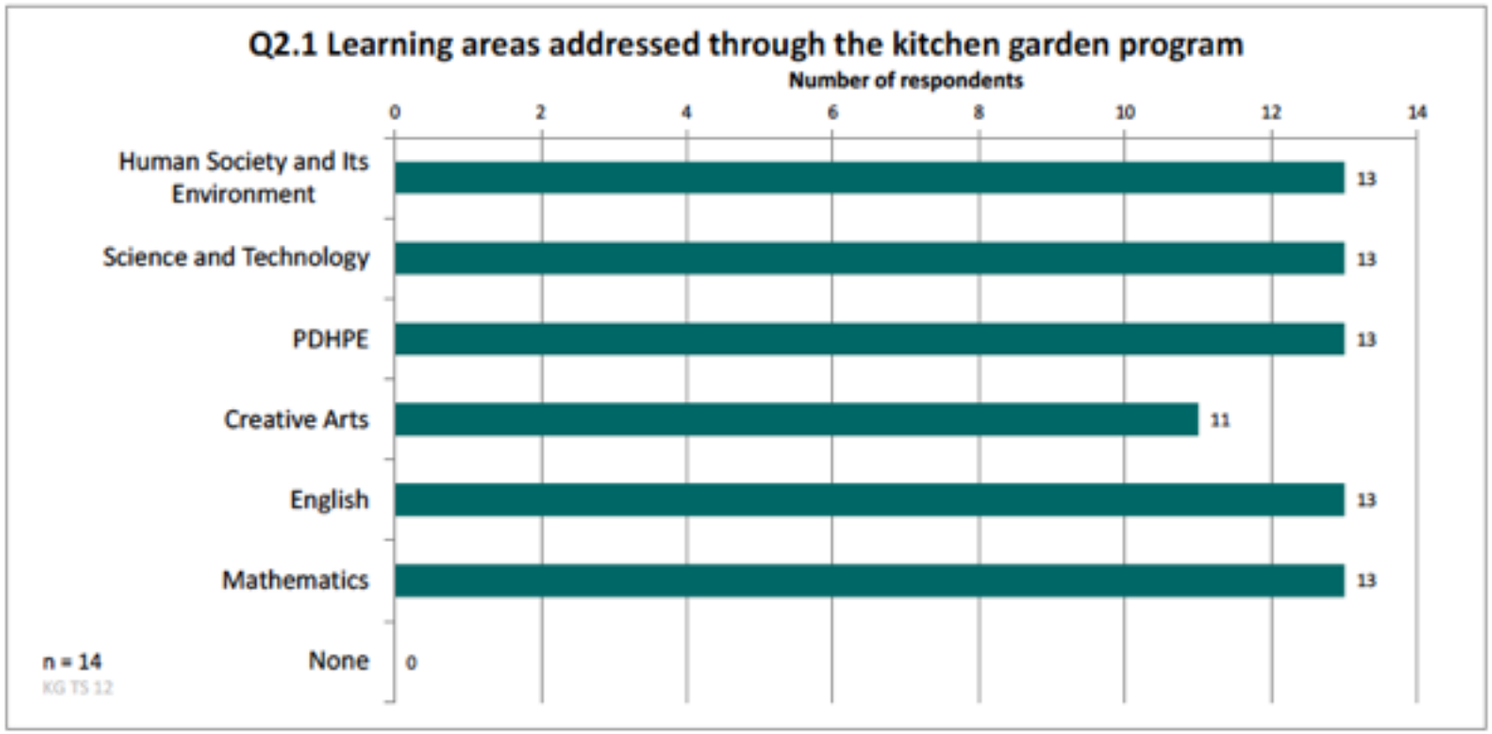
Kitchen and food gardens are an increasingly popular way for schools to promote environmental and sustainability learning and connect students with healthy food and lifestyles. These programs can help.

KidsGrow

This site provides a practical toolkit of resources to help schools get kids gardening. Specially created by teachers for teachers, the KidsGrow's hands-on gardening projects are directly linked to the school curriculum and expose students to a range of thinking skills and learning styles. For more information visit **KidsGrow.**

Brightly coloured barrels are used as planters.
Photo courtesy of Barooga Public School

Figure 4.6 Links to NSW K-6 syllabuses



Kitchen Garden Program

Kitchen and food gardens are an increasingly popular and effective way for schools to promote environmental sustainability learning and to connect students with healthy food and lifestyles. By using the table below schools can link student learning outcomes across the curriculum to the various activities and seasonal cycles involved in managing a kitchen garden and the preparation of fresh produce.

Curriculum Links to NSW K-6 syllabuses*

*Teachers were provided with curriculum links to the current NSW syllabus. As of 2014, NSW will begin a phased implementation of new syllabus based on the Australian Curriculum.

Location	Activity	English	Mathematics	Science & Technology	HSIE	Languages	PDHP
	Planting seeds and seedlings			INVS2.7 LTS2.3 PSS1.5			
	Measuring plants			INVS1.7 INVS2.7 LTS2.3 UTS1.9			
	Identifying parts of a plant			INVS2.7 LTS2.3 LTS3.3		2.UL.1 2.UL.2 2.UL.3 2.UL.4 3.UL.1 3.UL.2 3.UL.3 3.UL.4	

Measuring plant growth

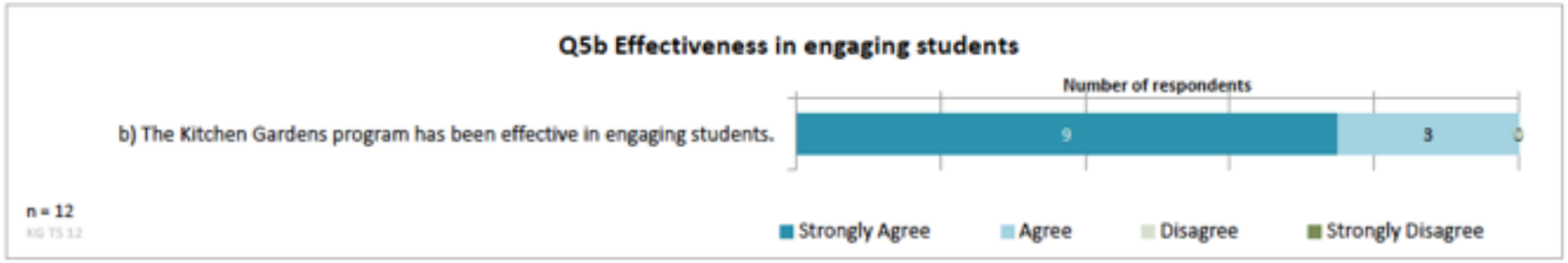
5 Effects for students

This section explores the effects for students of participating in kitchen garden activities, and focuses on the areas of student engagement and learning outcomes. Syllabus outcomes have been addressed by teachers in their programming, as shown in Section 4.

Key findings

- All students expressed positive comments about the *Kitchen Garden Pilot* program in their school.
- According to teachers, the *Kitchen Garden Pilot* program works effectively in engaging all students, and particularly students with special needs.
- Teachers report that students are developing greater respect for each other and the school, as well as respect for community volunteers.
- Students exhibit a good knowledge and understanding about food; where it comes from and how to cook and prepare foods fresh from the garden.
- Teachers report that students understand the cycle of food production and the importance of sustainable food practices.
- Parents and teachers commented that students are beginning to make healthier food choices for themselves.
- Student leadership skills are being developed in many schools as a result of the *Kitchen Garden Pilot* program.

Figure 5.2 Effectiveness of the program in engaging students as perceived by teachers

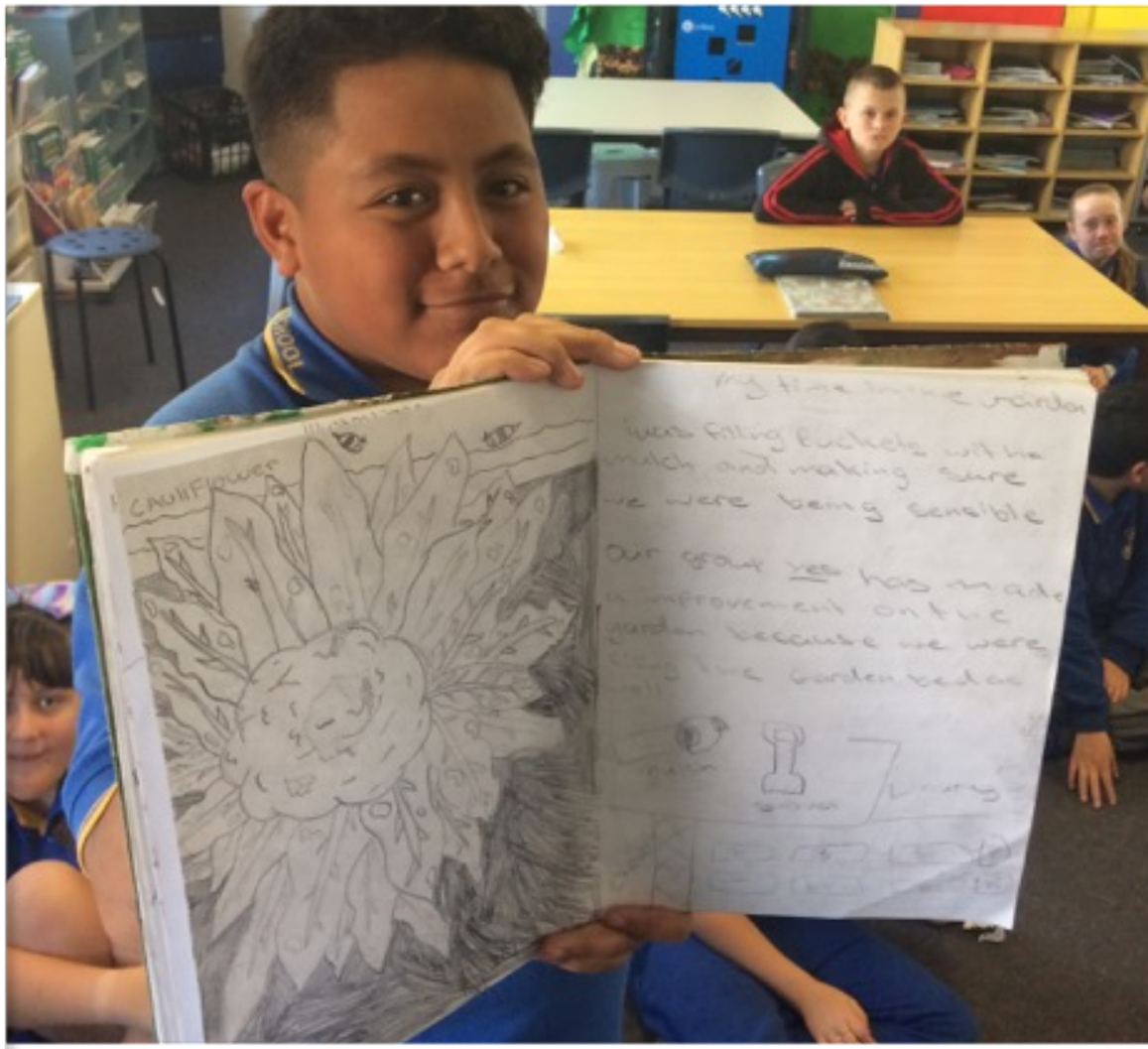


5.1.1 Benefits achieved for all students

When asked what they liked or did not like about the *Kitchen Garden Pilot* program, the overwhelming majority of students indicated that the garden made them *"feel good"*. Students commonly referred to the garden as a peaceful and calm place, a place where it was *"good to learn"*, and a place where you could feel *"excited"*, *"happy"* and have *"fun"*. This is exemplified by one student who liked:

> *"... [the] good time, fresh air, learning about plants, getting dirty; when you are bored you can get out there and do something."*

Oxley Park PS




Kitchen Garden Project

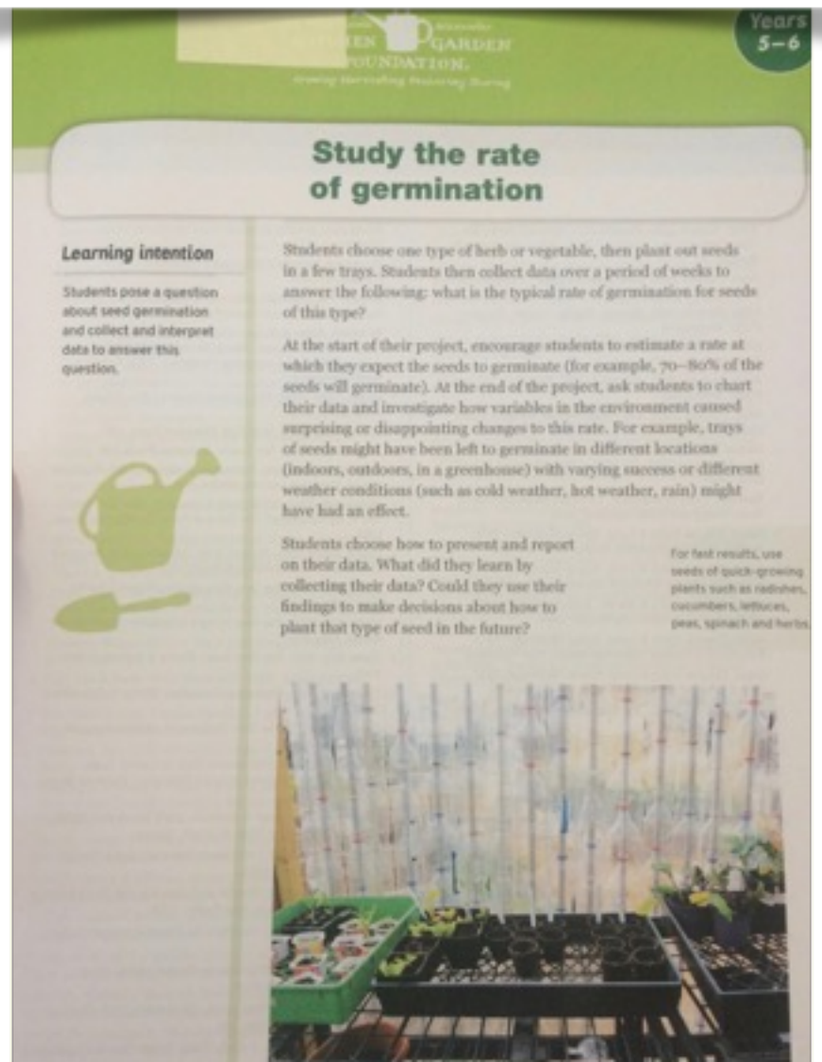
Chisholm PS

Cambridge Gardens PS


Stephanie Alexander
KITCHEN GARDEN FOUNDATION
Growing Harvesting Preparing Sharing
medibank
For Better Health
Working tog
grow healt
The Kitchen Garden Syllabus –
food education at your fingertips!
Kitchen Overview
First Kitchen class


THE TEMPERATE & COOL BOOK 2 SYLLABUS AT A GLANCE


Step-by-Step
Visual Cooking
and Gardening
Accessible Recipes and
Garden Activities
Growing
Harvesting
Preparing
Sharing
Kitchen Garden
CLASSROOM
Join the Kitchen
Garden Classroom!
www.kitchengardenfoundation.org.au
Literacy and
Numeracy
in the Kitchen and Garden
Ideas for Learning in Primary • Years F–6
BOOK
4
Kitchen Garden
Syllabus for Prim
(Years 3–6)
BOOK
3
Kitchen Ga
Syllabus for
BOOK
2
Kitchen Garden
Syllabus for Primary
(Years 3–6)


Years
5–6
Study the rate
of germination
Learning intention
Students pose a question about seed germination and collect and interpret data to answer this question.
Students choose one type of herb or vegetable, then plant out seeds in a few trays. Students then collect data over a period of weeks to answer the following: what is the typical rate of germination for seeds of this type?
At the start of their project, encourage students to estimate a rate at which they expect the seeds to germinate (for example, 70–80% of the seeds will germinate). At the end of the project, ask students to chart their data and investigate how variables in the environment caused surprising or disappointing changes to this rate. For example, trays of seeds might have been left to germinate in different locations (indoors, outdoors, in a greenhouse) with varying success or different weather conditions (such as cold weather, hot weather, rain) might have had an effect.
Students choose how to present and report on their data. What did they learn by collecting their data? Could they use their findings to make decisions about how to plant that type of seed in the future?
For fast results, use seeds of quick-growing plants such as radishes, cucumbers, lettuces, peas, spinach and herbs.

Kitchen Gardens

Learning resources

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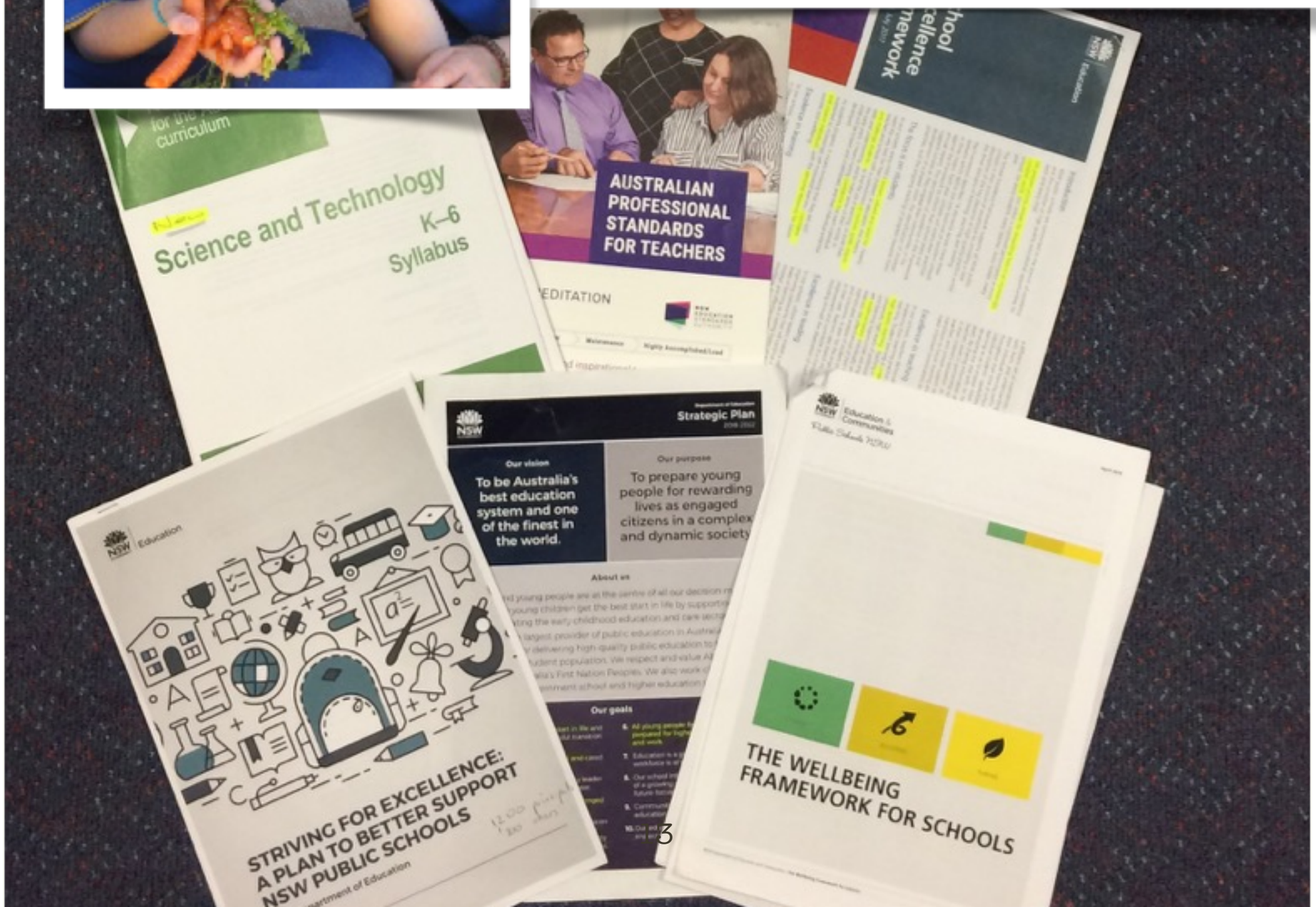
KidsGrow



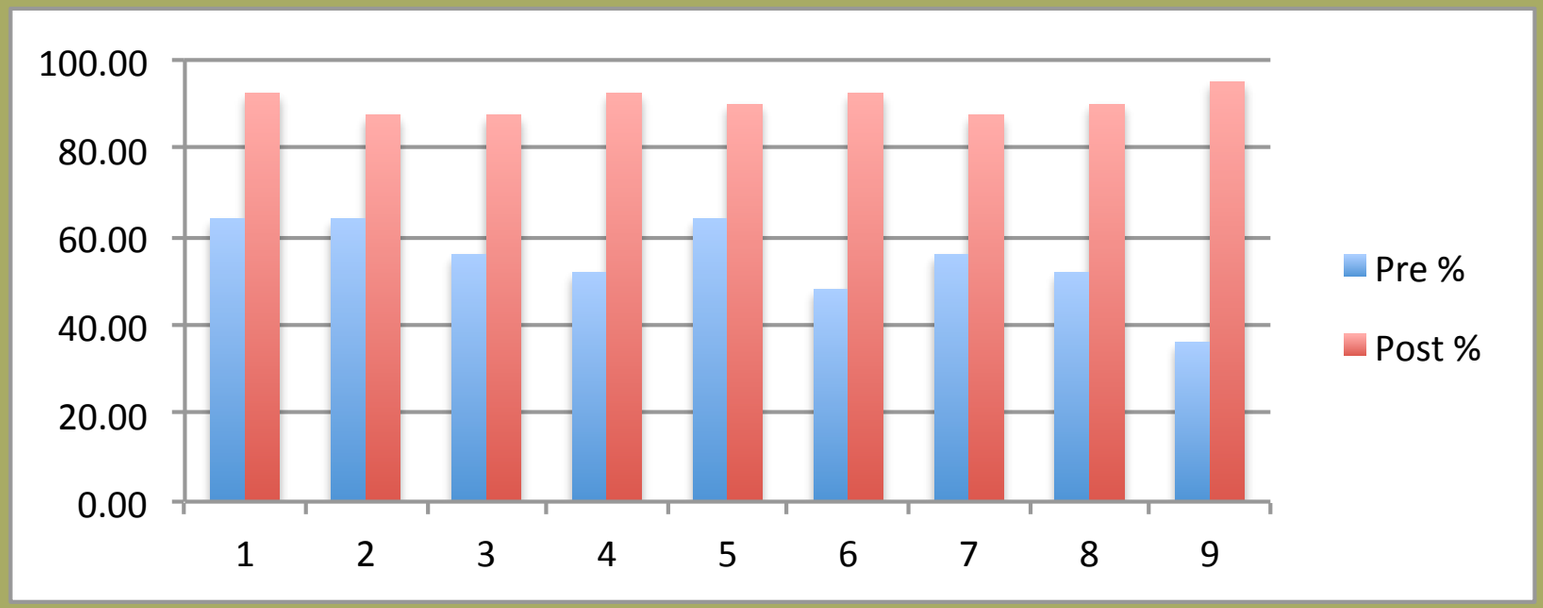
The ‘HOW’

PLEEC **leads** program implementation;

- PLEEC ‘Kitchen Garden’ Teacher & Start Up Budget 2020:
- $**23,540 all inclusive ($21k for teacher & $2540** approx for resources). DoE Sustainable Schools Grants **$15k** per school.
- Allows for chosen 3-4 trial classes to participate (1 day/pwk) and scalable up to more over time.
- **Surveys** of participating students and staff will be conducted at the beginning and end of the project to **measure** impact
- RSVP Mon **18/Nov** Email: branimir.lazendic@det.nsw.edu.au

Potential Legacy

2018 Teacher Feedback



Key

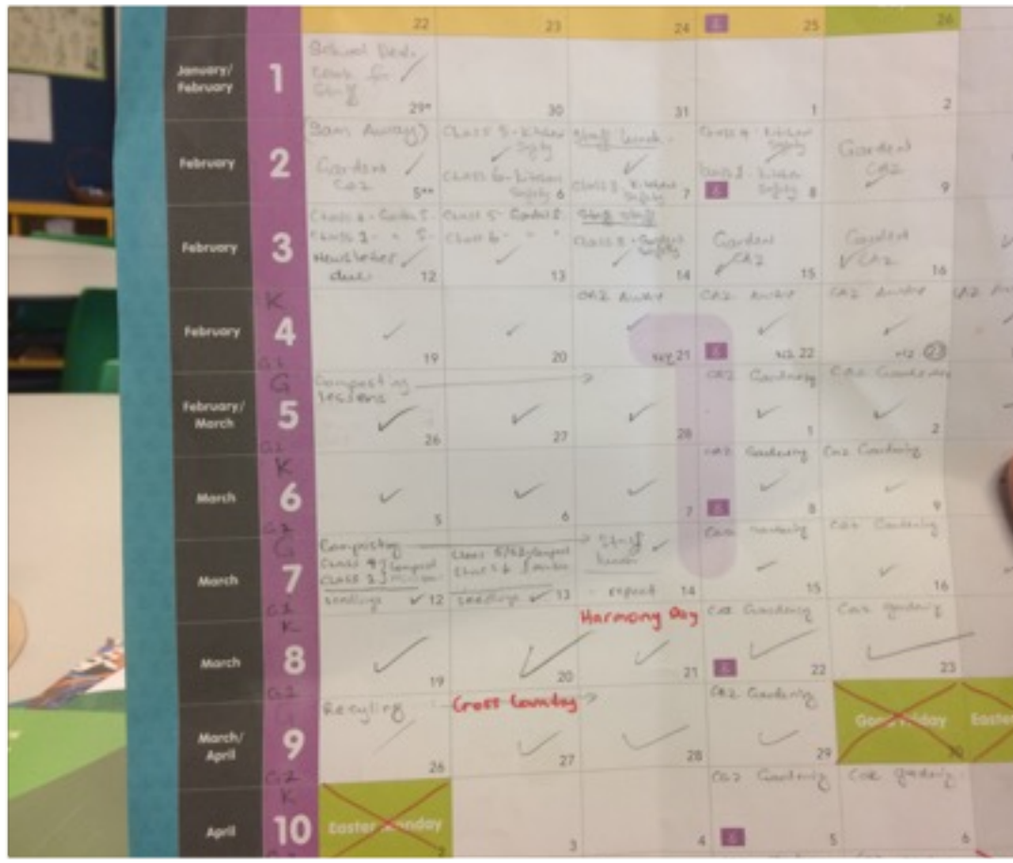
1 - *I know what 'Sustainability' (LAC) means and how to effectively integrate it into my curriculum.*
2 - *I know how to effectively and meaningfully develop the syllabus 'General Capabilities' in my students. In particular Personal & Social Responsibility, Ethical Understanding and Critical Thinking and Problem Solving.*
3 - *I know how to address the syllabus KLA outcomes through authentic/'real world' and highly engaging (hands-on), teaching and learning experiences.*
4 - *I am able to lead my class to make tangible and 'real world' changes that help our natural environment.*
5 - *I feel confident to lead other staff and students to make changes that really help our natural environment.*
6 - *My students collaborate to effectively produce meaningful outcomes.*
7 - *My students have string sense of belonging to their class/school.*
8 - *My students know 'why' they are learning and engage with a clear purpose.*
9 - *Students in my class have the confidence to share their knowledge beyond the boundaries of the classroom.*

Teacher Comments:

- A wonderful experience for staff and students. Children very engaged and enthusiastic about their learning and how they can promote this at home.
- I feel that the PBL project that we undertook at school this year helped me as a teacher to gain confidence in planning activities which would help the students to learn about sustainability. The students level of engagement was extraordinary.
- The Kitchen Garden program has made many great changes in our student's lives. From constructing their own vegetable gardens at home, to trying new vegetables that they wouldn't have dared to before. The simple tasks of producing small meals was new to many of them. Growing their own vegetables gave them a new sense of appreciation for the world around them and the importance of being sustainable.

Whalan PS E.G

Session	Monday	Tuesday	Wednesday
Morning	Class 4 - Science / SAKG	Class 5 - Science / SAKG	Class 1 - Tech RFF Scripture (9:30 - 10:00) Class 1 - Maths
Recess			
Middle	Class 1 - Science / SAKG	Class 6 - Science / SAKG	Class 3 - Science / SAKG
Lunch			
Afternoon	RFF	Class 1 - History	Class 1 - TBC



St Claire PS E.G

Super engaging!

ST CLAIR PS

Stephanie Alexander
KITCHEN GARDEN
FOUNDATION
Growing Harvesting Preparing Sharing


Kitchen Garden


Pear


Balsamic Vinaigrette
6 tablespoons Olive oil
3 tablespoons balsamic Vinegar
1/2 teaspoon salt
Basic Egg noodles
1 teaspoon bi-carb Soda
1½ teaspoons salt
Plain wheat flour (double the weight of the eggs in their shells.)
2 eggs (in their shell)
Cornflour, for dusting
"We Knead dough"
Chimichurri Sauce
1 red onion, chopped finely
1 garlic clove, chopped finely
1 teaspoon paprika
1 cup olive oil
3 tablespoons red vinegar
1 cup flat parsley, chopped
2 tablespoons oregano, chopped
2. Put the Lid on... and
Tart


Kitchen
Storeroom


PLEASE
Put Everything Back
Where It Belongs.


HARVEST

Why Kitchen Gardens?

Today kid's are not ok…

In Australia

Based on the findings of Professor Pasi Sahlberg

10% don't feel safe at home
47% sleep with smartphone every night
40% have sleeping problems
10% have abnormal social and emotional wellbeing
26% are overweight or obese
50% feel pressure from school work
Suicide rate of 15 to 24 year olds increased from 10.3% per 100,000 in 2007 to 12.7% in 2016 (+2.4%)

Latest health research 67% of ALL adults in Aus overweight or obese, projected to 83% by 2025. (Australian Bureau of Statistics data for 2017-18)