

The Magic of Growing...

Plants, relationships, partnerships and memories



ACKNOWLEDGEMENTS

This Junior Landcare educational resource has been developed by teachers with support from Landcare Australia and the Primary Industries Education Foundation (PIEF).

The resource is designed to introduce students to ways Youngtown Primary School involves every student in the school's garden, or outdoor learning centre, which is a versatile site used in every year level.

Teachers at Youngtown have adopted the philosophy that learning occurs in a variety of environments, not just the classroom. Even in a retirement village that adjoins the school, students learned about sustainability and partnered with the community's senior citizens to engage in a State and National Landcare initiative, resulting in winning the Tasmanian Landcare Award in 2011 and then winning the People's Choice Award in the National Landcare Awards in 2012. See http://www.landcareonline.com.au/?page_id=11232.

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Resource Description

YEAR LEVEL: FOUNDATION YEAR 6

THIS IS A UNIT OF WORK FOR SCIENCE, HEALTH AND PE.

This is a unit with five inquiry teaching sequences based on the 21st – century fluencies – Crockett et al. (2011) about students learning a crucial lesson, namely that their actions can make a tangible difference in the world around them.

At the same time, students are building a sense of belonging to a place. Learning is not confined to four walls. The school vision "inspired today - prepared for tomorrow" encompasses the values of learning, relationships, creativity and innovation, compassion and integrity. Each value is synonymous with the many learning experiences offered through the environmental initiative.

This learning sequence is an example of compassion; it is an initiative/learning sequence where children grow daffodils and iris plants in the school garden and then deliver them to residents of Glenara Lakes Retirement Village and City Mission during Senior's Week as a way of further learning and demonstrating their understanding of social and emotional well-being.

- It includes highlighting principles from the Global Digital Citizen organisation that describes certain fluencies (Solution Fluency, Collaboration Fluency, Media Fluency, Creativity Fluency, Information

Resource Description cont.

YEAR LEVEL: YEAR 6 FOUNDATION



- Fluency and Global Digital Citizenship) necessary for independent and creative thinking that our students require for their contribution to be competent and capable in the 21st century.
- The whole school community through key inquiry questions based on the Australian Curriculum is able to investigate an environmental issue in our local context and make links through curriculum "inquiry questions" to global issues. Such investigations might include monitoring, examining, problem solving, investigation, or modelling a solution. This directly impacts on children, teaching staff, community members and volunteers before, during and after the project. The emphasis is on starting small and thinking big.
- This resource outlines how Youngtown Primary School uses inquiry based learning, focus questions from the Australian Curriculum and the general capabilities from the Australian Curriculum of personal and social capabilities (self-awareness, self-management, social awareness and social management) to engage students in deep understanding about our value of compassion.

TO NOTE

This resource as a suggested teaching sequence...

This learning sequence is underpinned by the work of Lee Crocket. Using the concepts of *Literacy is Not Enough* (21st Century Fluencies for the Digital Age) the teacher moves away from the "guardian of knowledge to becoming the activator of learning". Specifically this sequence is

encompassing the 'solution fluency' as a structure for sequencing the learning and working through a problem based scenario.

For further information about this design please visit <http://globaldigitalcitizen.org/> <https://www.youtube.com/watch?v=N8DEeR1sraA>

Please remember that this teaching sequence is not a lock step approach. As children develop understanding

they will naturally move in and out of the 6'D's. As questions arise and inquiry evolves the more questions students and teachers will have. Learning is rarely linear.

Step One

The Scenario

Stop Press!



Expressions of interest have been called by the Mayor of Launceston to be involved in a project for Senior's Week in your local area. If you are slightly interested, then read on!

The press release below has been fabricated for the students of Youngtown Primary School to engage in a brief issued by the Mayor of Launceston City Council.

THE MAGIC OF GROWING...

The Mayor of Launceston is searching for a school to launch the new Launceston "Vision for 2020" by actively being involved in a project that demonstrates community spirit and partnerships with others. Click on the link to learn about the recently released Launceston Vision 2020 http://www.launceston.tas.gov.au/uploads/lcc/cont/_council/community_engagement/strategies_plans_and_reports/vision2020.pdf.

"I am Launceston in 2020. I am a vibrant, confident, 'life-size' city with opportunity for all in learning, work and recreation. I treasure my clean and beautiful environment and respect my heritage. I am outward looking, full of community spirit and move forward in partnership with others. I value the unique role I play in Tasmania and Australia."
(Annual Report L.C.C 2012/2013)

The Mayor has called your school because he has heard about the wonderful outdoor learning space that your school calls the Outdoor Classroom. Your school is well-known for its beautiful gardens, large vegetable and fruit gardens and the ability for all children to be involved in the "magic of growing".

Living next door to a retirement village presents a unique opportunity for children to be involved with the older residents. The council wonders how your school could promote the "community spirit" part of their vision through a Senior's Week activity with the neighbouring residents. Does anyone have any thoughts?

The only way the Launceston City Council can help is by donating a large bag of spring bulbs to you. This mixed bag of bulbs contains daffodils, irises and



freesias. Your challenge is to grow the plants ready for Senior's Week. They are not sure what you could do with the flowers once they bloom. You have been asked by the Launceston City Council to not only grow the flowers but also to record the process for other people to learn. If successful, the Launceston City Council would like to adopt the idea and introduce to more schools and community groups the following year.

Are you up for the challenge as a school? If so, the Launceston City Council would like you to emphasise and record the following areas so they can develop a blueprint for others:

- What are bulbs? Why they are different shapes?
- How could they be used for Senior's Week?
- What are the best conditions for growing the plants?
- Do all the bulbs flower at the same time?
- What advice would you give about growing bulbs to a new school taking on the project? At what stage do you harvest the flowers? What happens to the flowers?
- What happens to the bulbs after flowering? Can we share bulbs with others?
- Once the flowers are in bloom what can be done with them for Senior's Week?
- How do we involve the retirement village?
- How can you incorporate the whole school in this project?

Step Two

Define Understanding

Objective: Have students illustrate their understanding of the challenges set out in the scenario by providing an oral definition of the problem.



PURPOSE AND UNDERSTANDING



In this learning sequence students are required to undertake an inquiry around the concepts of plant life cycles, seasonal growing, acts of kindness and compassion. Students will need to understand about a plant life cycle from planting to flowering. Students will plant three varieties of bulbs and each week monitor growth rates until flowering. Students will use picture stories as the medium to generate an inquiry about the use of flowers for Senior's Week.

This inquiry will focus on the value of compassion and "random acts of kindness"

www.randomactsofkindness.org.

Students will create a digital essay or a series of photos to include on the school blog documenting the process. Students will be involved in paper-making and card construction to complement a visit to a retirement home during Senior's Week where bunches of flowers will be given to residents incorporating hand-made cards and paint stamped brown paper.

Students through discussion, story-telling and reading picture books will be immersed in a way of thinking that highlights a key school value: compassion. The physical act of giving provides the vehicle for students to experience compassion first hand.

The challenge is presented to stimulate thinking, engage the learner and allow for creativity to emerge as the challenge is realised. Students should be able to articulate their understanding through oral conversation and if appropriate a written statement.

Important note: the growing of plants is the vehicle to developing the deep conceptual understanding about compassion and kindness.

PREREQUISITE FOR PROGRESSION:

The Prerequisite for Progression are the checkpoints that occur at the end of each stage of the lesson. This is the time at which formative feedback is given to the students about what they have accomplished in that stage.

It describes what the students must complete before they move onto the next phase of the unit. (Crockett, et al).



- Understand about lifecycle of plants using bulbs as the example.
- Be involved in practical gardening – turning soil, raking, planting, watering mulching, weeding.
- Use an oral presentation to describe the bulb they are planting and the flower it produces.
- Contribute to group discussion about acts of compassion using a variety of thinking tools.
- Discuss what is meant by "random acts of kindness".
- Contribute ideas in a brainstorming session about how the flowers could be used as a part of Senior's Week.
- Think of designs that could be used for hand-made cards and paper.
- Contribute ideas about how the Outdoor Classroom could help in the area of compassion.
- Articulate with examples what are compassion and random acts of kindness.

Step Three

Discover

Objective: Have students investigate, research, read, discuss, gather, organise and compare data and knowledge.



It is a concept of looking backward in time to determine how a problem developed, how it was solved and what could have been done differently. As a teacher, this is the point of guiding students with ideas and suggestions to assist them in finding out.

DISCOVERY EXERCISE

What do children already know about compassion (caring and doing for others)?



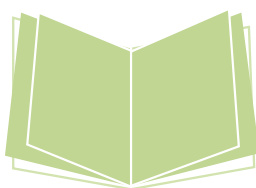
Working in small groups, students are posed a number of stimulus questions.

- When our bulbs flower how can we use them to show kindness to groups of people in our area?
- What is compassion?
- How could we show compassion by the growing of flowers in our garden?
- The retirement village is close to our school. How could we show compassion and kindness to this group of people?

1. Students share their findings back to the class and a member of the Launceston City Council who will be visiting.
2. Teacher summarises the main points and draws out the big ideas and asks students to share their understanding of compassion and kindness with family at home.

LITERARY ACTIVITY

Teacher reads (text of choice) to the students to clarify the concept of compassion.



An example of a literature activity:

Book Title: Wilfred Gordon
McDonald Partridge

Author: Mem Fox

Illustrator: Julie Vivas

<http://memfox.com/books/wilfrid-gordon-mcdonald-partridge/>

The purpose of this activity is to have children begin to empathise ("walk in their shoes").

A selection of resources on compassion

<http://www.parentmap.com/article/media-guide-compassion-and-kindness>

PREREQUISITE OF PROGRESSION:

Students have worked in groups and collected research on compassion and kindness. Picture books are used to create images and contextualise understanding. Children will share their ideas with peers, teacher and family.



Step Four Dream

Objective: Have students discuss how they are going to carry out the various components of the project.



CONSIDERING THE CAPACITY OF THE PROJECT

Now that students have discovered the appropriate knowledge and data from the Discover phase, it's time to let them discuss different ideas on how they will incorporate it into designing their unique solutions for the project. The Dream stage includes brainstorming to develop a SMART solution, meaning that it is Specific, Measureable, Attainable, Realistic, and Timely.

Allowing time for students to discover about aspects of compassion and kindness students will be able to make real world and contextual links about growing flowers and delivering them to older members of our community. In essence, students will have some understanding that acts of kindness and compassion have a reciprocal effect: that is, it makes both parties feel good! Engaging in a practical skill of growing and nurturing plants so that they can be harvested and used in an act of kindness is a tangible link between "growing and giving".

PREREQUISITE OF PROGRESSION:

The class has brainstormed ideas to begin their learning journey and have answered the questions posed in the dream phase. They have discussed timeline of events, possibilities for planting (including numbers of bulbs, sorting of bulbs and designs for cards and paper). Information is documented on

Imagine your school has been selected by the Launceston City Council as the winning school to trial this new initiative. The bag of daffodils has arrived and some have green shoots! I wonder why? It is up to the Outdoor Classroom to design how this project will work. Remember the aim is to grow the bulbs to produce flowers that can be harvested, wrapped with lovely paper, accompanied by a handmade, hand-written card and distributed with a smile to the local retirement village.

Your goal is to achieve this by Senior's Week. In order to achieve this you will have to plant, nurture and carefully watch the plants grow and at the same time make cards and paper.

Everything has to be timed ready for Senior's Week. There is no guarantee that the plants will grow, how will weather and pests affect the growth of plants, when is the best time to harvest and how will they be transported to the retirement village? Remember that all of this must be documented for the Launceston City Council as a blueprint for future schools that take up the initiative.

Just imagine what the residents will say when you/students arrive with bunches of flowers for them! How will you respond when the door opens?



the school blog along with photos of the garden patch and written information to describe the photos.



Step Five Design

Objective: Have students involved in the mapping of the production process for the project, creating a timeline with specific milestones, deadlines and responsibilities.

This is when the ideas are recorded into a workable concept for delivery.

Students are now involved in the practical thinking about how the project will evolve. Students will have researched examples of card and paper making, planting and caring of bulbs and talked about the logistics of delivering the flowers. The three areas for consideration are:



GARDEN PLANTING

- Students choose a site for bulbs to be planted.
- Students consider how many bulbs are to be planted in each section.
- Students plan how the plants will be cared for (watered, weeded, mulched).
- Students view videos for ideas

Weblinks:

<http://www.abc.net.au/gardening/stories/s2333647.htm>

ORGANISATION OF CARDS, PAPER AND FLOWER BUNCHES

- Students research sample cards and instructions of how to make them

Weblinks:

<http://www.mrprintables.com/spring-crafts-for-kids-daffodils.html>

<http://kids.creativity-portal.com/d/projects/gift.wrapping/>

ORGANISATION OF THE DAY

- Students brainstorm ideas about how to transport the flowers, e.g. wheelbarrow, large tubs.
- Students collate ideas regarding the logistics of the walk – permission forms, wet weather.
- Students devise a strategy for how to distribute flowers – safety aspects and supervision.
- Students consider: “What happens if we do not harvest enough flowers?”
For example, call on our school community to bring extra flowers and greenery from home on the day.

PREREQUISITE OF PROGRESSION:

Students are able to document in oral or written/digital forms how this project is to occur. The understanding is demonstrated by the use of the blog and the children explaining their thinking to a peer class group.



Step Six

Deliver

Objective: Have students Deliver and report back on the project.



The Deliver phase has two stages – production and publication. In the production stage the project comes to life – this is the doing phase. At the end of this phase, the project/s should be completed.

Students are documenting this experience by digital photographs and recordings.



PUBLICATION STAGE

Students get to showcase all of their thinking and planning. This is the time when students get to deliver their solution to each other or the audience. This is a good time for peer or self- assessment.

- This is the day of the flower deliveries. It is when the daffodils, irises and freesias are harvested by students, sorted into greenery and flowers, counted into 10 flowers per bundle, bundled into bunches, wrapped in paper and matched with a hand-made cards. (Note: Flowers should be kept with their stems in water until the bunches are made up to stop them from wilting).
- Flower bunches are placed in wheelbarrows and large tubs ready for distribution.
- A picture-book story is re-read to reinforce the message of compassion.

PRODUCTION STAGE

At this stage students/staff are ready to distribute flowers, this is really "bringing the dream" to life! Excursion guidelines and risk management is completed by the supervising teacher and class groups begins the process of distributing flowers to residents. This will be contextualised to each school setting.

AS PER ORGANISATIONAL PLANS:

- Students work in a buddy system and are allocated a certain number of flower bunches.
- Students must be in direct supervision of teacher/adult as they deliver flowers.
- Remaining pairs wait until students have returned from delivering their bunch of flowers.

PREREQUISITE OF PROGRESSION:

Each pair has delivered their flowers and cards to residents in the retirement village.



Step Seven Debrief

Objective: Assess the results of the project.

This phase is extremely beneficial to future learning. Sadly, sometimes this phase is missed because the Deliver phase can constitute the final part of the learning or there is no time left if delivery happens at the end of the term. It is a chance for children to look back on their learning journey, and provide feedback for improvement or refinement. This is about student voice!

STUDENTS REFLECT ON THEIR LEARNING.

Teacher provides the students with a set of focus questions for their writing:

1. Write about something new you learnt in this unit about ways some plants are grown.
2. What is one thing I have learned about my own values when it comes to showing thoughtfulness and compassion for others?
3. What have I learned about making cards and wrapping paper?
4. How might I help others know more about how everyone can get involved in Senior's Week?
5. What have I learned about the ways materials, systems, tools and equipment are required to produce flowers?
6. What would still like to find out about producing flowers, showing compassion and supporting others?
7. How well did I/we participate in any group/team learning activities?
8. What questions do you have about the topic at the moment?
9. What piece of work am I most satisfied with?
10. What is my favourite memory of growing and sharing flowers with others?



Classes incorporate their digital photos into the school blog and reflect back using thinking tools (<http://youngtownoutdoorclassroom.blogspot.com.au/>).



Classes use their digital photos to complete a picture book that describes the journey of compassion through the Outdoor Classroom.



A record of the project is sent to the Launceston City Council to be presented at the next meeting of Aldermen. The experience is captured by high school students who are studying media production. See [youtube.com/watch?v=Yn2BQaZmpvo](https://www.youtube.com/watch?v=Yn2BQaZmpvo)

Australian Curriculum Content Descriptions

CROSS CURRICULUM PRIORITIES: SUSTAINABILITY

OI.3: Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.

OI.7: Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

Source: Australian Curriculum, Assessment and Reporting Authority (ACARA), downloaded from the Australian Curriculum website on 24th August 2014.

GENERAL CAPABILITIES

Personal and social capabilities

RESOURCES

- Australian Academy of Science. (2005) Primary Connections, Canberra, ACT
- Crockett, L., Jukes, I. & Churches, A. (2011) *Literacy is Not Enough*. 21st Century Fluency Project and Corwin

WEBSITES

- ABC Gardening Australia - *Daffodil's Fact Sheet*
<http://www.abc.net.au/gardening/stories/s2333647.htm>
- Australian Curriculum, Assessment and Reporting Authority (ACARA),
www.australiancurriculum.edu.au
- Creativity Portal
http://kids.creativity-portal.com/d/projects/gift_wrapping/
- GlobalDigitalCitizen
<http://globaldigitalcitizen.org/>
<https://www.youtube.com/watch?v=N8DEeR1sraA>
- Mem Fox
<http://memfox.com/books/wilfrid-gordon-mcdonald-partridge/>

SCIENCE

STRAND: Science Understanding: Biological sciences

ENTRY: Living things have basic needs, including food and water **ACSSU002**

ENTRY: Living things live in different places where their needs are met **ACSSU211**

ENTRY: Living things grow, change and have offspring similar to themselves **ACSSU030**

ENTRY: Living things have life cycles **ACSSU072**

ENTRY: Living things have structural features and adaptations that help them to survive in their environment **ACSSU043**

ENTRY: The growth and survival of living things are affected by the physical conditions of their environment **ACSSU094**

HEALTH AND PE

STRAND: Personal, social and community health: Contributing to healthy and active communities

ENTRY: Recognise similarities and differences in individuals and groups, and explore how these are celebrated and respected **ACPPS024**

ENTRY: Research own heritage and cultural identities, and explore strategies to respect and value diversity **ACPPS042 ACPPS054**

ENTRY: Investigate and reflect on how valuing diversity positively influences the wellbeing of the community **ACPPS060**

- Mr Printables
<http://www.mrprintables.com/spring-crafts-for-kids-daffodils.html>
- ParentMap
<http://www.parentmap.com/article/media-guide-compassion-and-kindness>
- Random Acts of Kindness Foundation
<http://www.randomactsofkindness.org/>
- The Growing Recognition Program
<https://www.youtube.com/watch?v=Yn2BQaZmpvo>
- Junior Landcare
www.juniorlandcare.com.au

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