

# **Avocados in Early Childhood Initiative**

Woodrow Consulting Pty Ltd

Project Number: AV09522

## **AV09522**

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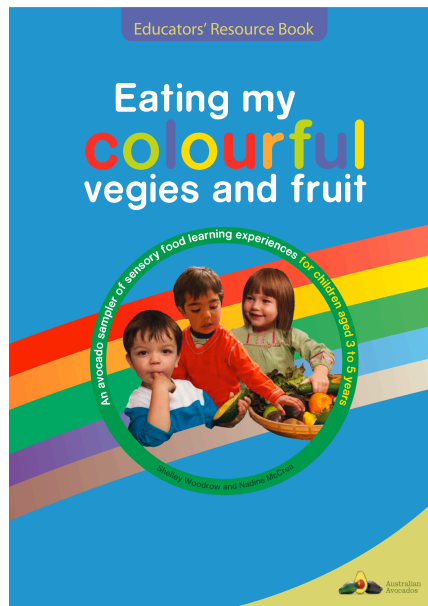


*Horticulture Australia*

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## AVOCADO'S IN EARLY CHILDHOOD PROJECT FINAL REPORT

AUGUST 16<sup>th</sup> 2010



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**Background:**

The avocado industry is seeking to increase the consumption of avocados amongst children. The best time to attempt this task is while those food and taste preferences and habits are being formed – before children reach school age. Therefore the development of an avocado-focused food learning resource for Early Childhood educators was undertaken in 2009 - 2010. With behaviour change as the avocado industry's goal, the most important component of an avocados education initiative must be for children to be able to taste, touch smell, prepare, share and enjoy avocados in a positive, fun, social learning setting over a number of weeks at least. The resultant food learning resources – 'Eating My Colourful Vegies and Fruit' - will support the new National Early Years Learning Framework and mainly target educators of 3 – 5 year olds in Long Day Care Centres and Preschools.

**Task:**

The main task for 2009 - 2010 was to create a food education resource to final art stage for early childhood educators presenting avocados in the context of broader key nutrition/health messages acceptable to the Early Childhood (EC) curriculum such as "Eating a variety of vegetables and fruit", "Start with green plant foods", "Try new foods", "Language and literacy development through sensory food experiences". One of the resources planned was a DVD to complement the material and support EC educators in using the materials by showcasing the materials in action in preschools and key food education and nutrition background messages.

The other key task was to trial the draft resource in at least 5 early childhood centres and other early childhood stakeholders in a number of states, plan the delivery strategy for 2010-2011 and to identify and/or establish initial contact with a number of potential partners in the future roll out of the program.

## **Outcomes:**

### **The Kit:**

'Eating My Colourful Vegies and Fruit' is a multi-faceted educational program that includes practical support for participating early childhood centres. There is a comprehensive educator's booklet supported by colourful and engaging resources including posters, colour swatches, food finder, songs and child-friendly recipes.

The key food learning ideas in this resource include:

- Be adventurous – try new food, especially green vegetable-type plant foods. Just be curious or try tiny tastes to start. Come along on an avocado tasting adventure!
- Explore and choose from the rainbow of colourful vegetables and fruits as they provide a wide variety of important 'things' (called nutrients) for your body.
- Extend your language and literacy through sensory food exploration and food preparation of raw vegies and fruit.
- Develop a broader appreciation and understanding of the 'socialness' of food.
- Use encouraging positive language when exploring and tasting new foods. Instead of "yucky" try "I don't like it yet", "I like it a little bit" or "I'll try it again another time". This encourages respect for other people's food preferences and food culture.

There are five learning experiences in the resource. Each is presented in a consistent format involving a multi-step process that ensures meaningful and worthwhile food engagement and learning for children. The steps involve asking focus questions, stimulating curiosity and discussion, then moving on to hands-on food activity and finally encouraging reflection and sharing experiences with others.

Real hands-on sensory experiences of vegetables and fruit are at the core of the learning experiences, and avocados feature in each experience. A key aspect of the "Eating My Colourful Vegies and Fruit" is the provision of a tray of avocados to participating centres to ensure avocados are incorporated into the learning experiences.

### **The Resource Creators**

This resource has been developed by two highly qualified and experienced educators who understand the specialist area of child-centred food and nutrition education.

*Shelley Woodrow*

Shelley is an independent education consultant with 20 years experience in the development, production and delivery of high quality, multi-media, cross-curriculum education resources to teachers and students throughout Australia. With a degree in primary education and a post graduate diploma in museum education, her professional experience is broad ranging and includes a focus on child-centred food and nutrition education. Significant projects she has managed and co-authored include *KidsGrow* (gardening) and *Hands On Food* (food and nutrition), both national primary school initiatives.

*Nadine McCrea*

The University of New England entered into an agreement with Woodrow Consulting to allow Nadine McCrea's input to the development of the resource. Nadine is Associate Professor of Early Childhood Education at University of New England, Armidale, NSW. For many years she has advocated for food learning pedagogy and pioneered a child-centred foodcycle approach. Nadine's PhD and other publications include: *Early Childhood Foodcycle Learning – beliefs, happenings, management in three child care centres*; *Everyday Learning about Healthy Bodies*; *There's More to Food than Eating*; 'Starting sustainability early...'; 'Food as shared living-and-learning'; 'What are your green educational values? Consider: Children as veggie gardeners'

In order to secure 'buy in' from the education sector, the learning experiences of the 'Eating My Colourful Vegies and Fruits' resource have been designed to support and complement the following early childhood initiatives:

- Being, Belonging, Becoming. The National Early Years Learning Framework for Australia (2009). In particular, outcomes related to health, wellbeing, identity, connection, engagement with learning, and communication. For example 'Children show increasing awareness of healthy lifestyles and good nutrition'; 'Children develop dispositions for learning' and 'Children take increasing responsibility for their own health and physical wellbeing.'
- National Quality Standard for Early Childhood Education and Care and School Age Care from COAG (2009).
- National, state and regional nutrition and health initiatives such as the National Dietary Guidelines; Go for 2 & 5; the National Obesity Strategy; Get Up & Grow, Healthy eating and physical activity for early childhood by Commonwealth Department of Health and Ageing

(2009); National Start Right, Eat Right Award Scheme; Munch and Move and Good for kids, good for life (NSW); Kids – ‘Go for your life’ (Victoria).

The ‘Eating My Colourful Vegies and Fruit’ kit includes the following elements:

**Book for Educators:**

**Introduction**

Includes:

- What's in the kit
- The big ideas for children in the resource
- 'Try new foods' tasting protocol
- Overview of the learning experiences
- How the learning experiences work

**Learning**

**Experience 1**

**We are plant  
investigators**

Children investigate parts of edible plants (vegetables and fruit).

They plant a big avocado seed. Includes:

- 'Edible Plant Parts' resource
- 'My Tasting the Rainbow Journal'

**Learning**

**Experience 2**

**We are sensory  
food detectives**

Children use their senses to explore avocados as well as a variety of green vegies and fruit and detect a range of shapes, weight, textures and aromas. Includes:

- 'Alvin Avocado' puppet resource
- Action rhyme 'I Wiggle My Fingers'

**Learning**

**Experience 3**

**We are colourful  
food explorers**

Children become ‘rainbow explorers’ as they sort and create a rainbow of colourful vegies and some fruit. They then become ‘green bite tasters’ and explore sample tastes of green vegies and fruit, including avocados.

The tasting protocol is explored with children.

Includes:

- Blackline 'Rainbow Poster' with shapes and names of vegies and fruit
- 'Eating the Rainbow' songs and rhyme

**About Setting Up**

Detailed instructions on how to set up and use the picto-recipes which are used in Learning Experiences 4 & 5

## **the Picto-Recipes**

### **Learning Experience 4 We are green snack makers**

Children prepare an individual green snack and eat with friends. Children follow the steps of a picto-recipe to inform and guide them through the ingredients and processes.

Includes:

- Picto-recipe - Lazy Green Caterpillars

### **Learning Experience 5**

### **We are rainbow gourmets**

Children create a dish to share, featuring a special ingredient - avocados - and a rainbow of other colourful vegies and fruit. Children take on the role of 'rainbow gourmets', and use a sequenced picto-recipe card system to prepare food for a 'Rainbow Celebration'. A preparation table is set-up, and a separate eating table for children to sit, eat and share food and conversations.

Includes:

- Picto-recipe - Asian Avo Rolls
- Picto-recipe - Avocado Zesty Dip
- Picto-recipe - Rainbow Tower with Avocado Cement
- Picto-recipe - Warm Green Potato Boats

### **Support Resources for Educators**

Includes:

- Food literacy context
- Mapping food links across early childhood learning
- Key ideas used in the resource
- List of children's food related literature
- Further references for directors, educators and cooks
- Food tips and suggestions
- Rainbow checklist planner for the centre cook
- Recipes to try at the centre and share with parents
- Sample newsletter and recipes for parents

### **Other Resources**

#### **POSTER - 'Tasting the Rainbow of Colourful Vegies and Fruit'**

Large format colourful poster can be used on the wall, table or floor and shows photographs of vegies and fruit arranged in the five colours of the 'vegie and fruit rainbow'. The poster also includes a rich selection of food-related sensory words that educators can use to encourage young children's vocabulary and language development.

#### **'Rainbow Colour**

Five bright colour samplers provide a range of hues and shades for each colour of the 'vegie and fruit

<b>Swatch'</b>	rainbow'. Children can match, sort and compare real food colours against the swatches to find 'same', 'similar', and 'different'.
<b>'My Food Finder'</b>	Children can use this set of sturdy avocado-shaped view finders to help focus their attention while investigating and exploring the colours, shapes, textures and sizes of various vegies and fruit.
<b>Set of 3 Picto-Recipe Cards</b>	A set of three picto-recipe cards providing a sequence of visual representations of each step of a recipe enabling children to make an individual serve.
<b>DVD (Available from February 2011)</b>	<p>The filming of this resource was postponed until October 2010 when printed resources could be filmed in use in pilot preschools. Planning for the content is underway and includes:</p> <ul style="list-style-type: none"><li>• Examples of the learning experiences in action in early childhood centres.</li><li>• The food education rationale for the ideas embedded in the learning experiences.</li><li>• Tips and suggestions for preparing food with young children.</li><li>• Suggestions for including avocados on the menu for young children.</li><li>• Extra learning tools, resources and recipes to print.</li></ul>
<b>'Avocado Colour and Ripeness Chart' and 'The Little Green Book'</b>	Existing Avocado Australia resources have been included that explain the different varieties of avocados and how to assess their ripeness. The Little Green Book explains the journey of avocados through the supply chain.

### **Trial of Draft Resources**

The draft resources were trialled in April/May 2010 by eight early childhood educators and three other early childhood sector stakeholders (see Appendix 1,2 and 3). Feedback was positive and constructive and adjustments were made to the materials. Additional feedback from the avocado industry contributed to adjustments to the educators' booklet resulting in 5 rather than the 6 original learning experiences and additional avocado focused elements being incorporated into each learning experience.

### **Potential collaborators in the future roll out of the resource**

Identifying potential partners amongst key stakeholders (see Appendix 4) through this phase of development has been the first step in establishing ongoing support for the 'Eating My Colourful Vegies and Fruit' materials. Given that there are a large number of state and national initiatives focused

on health and nutrition for young children, it is important to be able demonstrate how 'Eating My Colourful Vegies and Fruit' complements and supports rather than competes with them. Now, with the completed kit, it would be prudent to revisit key stakeholders and give them a fuller briefing on materials and the program strategy in order to identify any opportunities for facilitating the roll out to early childhood centres. Organisations involved in training are strong possibilities such as TAFE's with early childhood training, Early Childhood Australia, Gowrie Australia and Departments of Education. There is a wide disparity in the activities in these organisations state to state e.g. Victoria's Gowrie organisation is very active and well organised while it is less so in other states.

Other strong possibilities for support are health-focused organisations in each state which have a mandate to promote the consumption of vegies and fruit and healthy lifestyles generally e.g. State Departments of Health, state offices of Cancer Council, Diabetes Australia, National Heart Foundation, Healthy Kids NSW. A number of these organisations who were briefed during the development phase of the "Eating My Colourful Vegies and Fruit" resource were very supportive and interested to be consulted further about the programs roll out once the kit was printed.

### **The plan for delivery of the resource to Early Childhood Centres**

A region-by-region 2-phase rollout is planned to 440 Long Day Care centres and Preschools in 2010-11.

- in September 2010 171 kits will be delivered to invited early childhood centres with a 3 – 5 year old education program in 3 regions – 21 to Armidale, 75 in metro inner Sydney and 75 to Met East Melbourne.
- in May 2011 the kit will be delivered to a further 260 in selected regions

The strategy for ensuring the resources have the best chance of being used by educators includes the delivery of a tray of avocados to coincide with the commencement of the program in the participating EC centres.

#### **VIC**

##### **Met East (Melbourne)**

For the purposes of the Avocado project will target Met East - Boroondara, Manningham, Whitehorse, Waverley, Monash, Knox, Maroondah

##### **NSW - Metro Sydney, Hunter region to focus on Armidale**

## **Conclusion**

The piloted “Eating My Colourful Vegies and Fruit’ resource is now complete and the delivery strategy in place to pilot the next phase of the initiative. Following up on stakeholder leads will be an important part of the next phase of the program to establish a range of supported mechanisms for getting the material into the hands of educators who will bring the learning experiences alive for children. The inclusion of an accompanying tray of avocados to participating early childhood centres in a way to ensure that real avocados tasting experiences are a central food experience in the program.

## APPENDIX 1.

### REVIEW QUESTIONS FOR TRIAL

#### **EATING MY COLOURFUL VEGIES AND FRUIT** RESOURCE

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Please post back the booklet with your specific comments (made directly on the draft) and this review question form to me by 10<sup>th</sup> May 2010:

Shelley Woodrow                      49 York Terrace  
BILGOLA  
NSW 2107

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1. Please comment on the usefulness/suggestions/ constructive criticism of the introductory section (pages 2 – 10 of the Educator's booklet). Is there anything included that would be better arranged? How? Specific comments can be placed on the pages of the draft

Is there anything missing that should be there?

Is there anything included that could be deleted? (We are always looking to reduce the number of pages!!)

2. Please comment on the overall design style of

**The Educator's Booklet** (will be A4 x 44 pages, wire bound, 4 colour, photos of children doing the experience, photos of vegies and fruit)

3. Please comment on the overall scope of the 6 Learning Experiences (specific comments can be placed on the pages of the draft)

4. Please comment on the overall design style of  
**The "Tasting the rainbow of colourful vegies and fruit" Poster**

(large format 1000mm x 600mm, celloglazed both sides, 4 colour, fruit and vegetable photos in proportion to each other wherever possible, as close to life size as possible. Will include sensory words along each colour band edge for educator to use in developing language around sensory food experiences. See copy attached to visual of preliminary design)

**The Rainbow Colour swatch** (we only have one – “green”) - of the five completed at this stage but there will be one colour for each colour of the vegie and fruit rainbow as well a cover that will show all the colours of the rainbow together)

**The Avocado-shaped “My Food Finder”**

**The set of 3 Picto-recipe cards**

**5. Please comment on the recipes in Experience 6 and the final section** (directly on pages)

**6. We are proposing to offer the resource (and a tray of avocados for each participating EC centre). Here is how it will work:**

Selected ECC's in a particular region will receive a phone call inviting their participation.

They will sign up online and must agree to offer at least 3 of the learning experiences, offer tastes of avocados to children during the program, and provide some evidence at the end of the up to one month program as to how they have used materials (and avocados) with children e.g. photo, 100 word description, sample of newsletter to families etc.

Once signed up they will receive a kit. (about 6 weeks before program is due to commence)

They will receive an email reminder one week before avos delivered.

Avos delivered in November (on designated day) to coincide with the designated first week of program.

EC's conduct learning experiences over 1 – 4 weeks period.

Once feedback is received ECC's will be sent an extra educational resource as thankyou.

**Please comment: e.g. what is reasonable to request as evidence of use of materials and avos with children?**

#### **OTHER COMMENTS?**

Also do you have any suggestions for additional examples of relevant children's books? Full references appreciated.

## APPENDIX 2.

### Sample Trial Letter

Creina Porter  
"Kids – Go for your Life"  
100 Drummond St  
Carlton  
VIC  
24<sup>th</sup> April 2010

Dear Creina

Thank you for agreeing to review this draft of the resource *Eating My Colourful Vegies and Fruit. An avocado sampler of learning experiences for children aged 3 to 5 years*. The resource has been initiated by the Avocado Growers of Australia through Horticulture Australia and is aimed at educators of children aged 3 to 5 years in early childhood learning centres around Australia.

The main purpose of the resource is to encourage children to...

- Eat more green vegetable-type plant foods
- Choose from the rainbow of colourful vegetables and fruits as they provide a wide variety of important nutrients
- Be adventurous - try new veggie-type foods using the *Tasting Protocol*
- Further develop language and literacy through sensory food experiences
- Be part of shared, social food events and meals
- Develop food literacy

As far as the Avocado industry is concerned, their interest is in presenting avocados in the context of a colourful range of vegies and fruit. This fits nicely with the broader concern in the Health Sector at national, state and local level, to encourage children's consumption of more green plant foods.

Nadine McCrea from the Early Childhood Education unit at UNE and I are the key writers on the project – we are both educators each with over 20 years experience in the development of food education resources for children. We are seeking input from the Early Childhood sector and practicing EC educators to refine the resource and ensure its relevance.

The material has yet to be tightly edited but we wanted to give you the opportunity to comment while it was still in a malleable state!

The enclosed Trial Folder contains the draft of the Educators' booklet – the first section and Experience One have been roughly formatted to give you an idea of how the book might look when completed. From Experience Two onwards the material is unformatted so may be a little harder to navigate.

The final section - TIPS & SUGGESTIONS FOR PARENTS & COOKS - has not been completed and is a rough draft form only. However we have included the range of recipes that will be offered and an indication of what this section will contain for your comment.

At the back of the Trial Folder are a number of illustrations of the some of the resources to be included in the pack:

- A large format poster "Tasting the rainbow of Colourful Vegies and fruit" (1m x 70cm)
- Rainbow Colour Swatch
- Avocado-shaped "My food Finder"
- Set of 3 Picto-Recipe cards and Educator's master recipe for "Making Lazy Green Caterpillars"

The final item to be included in the resource - the DVD – will be filmed during the first round of delivery and trial of the kit in November 2010 so is not available to be reviewed. It is envisioned that the DVD will be about 10 minutes long and aimed at providing Educators with examples of each of the 6 learning experiences in action – set in an EC centre with an educator talking about tips and suggestions for using the resource, vision of children doing the activities, using the picto-recipes, exploring food etc. It will also have a message from a nutritionist about early childhood food learning and food tips and suggestions.

As the resource is provided by the Avocado industry the delivery mechanism will include the delivery of a tray of avocados to 450 invited participating EC centres during the one month program to be incorporated into the children's food exploration experiences. The program will also have a dedicated website with other resources, updates, recipes, resources for families etc. The plan is that the program (plus trays of avocados) will be free for 450 invited EC centres each year – EC's will be selected region by region and may initially have to be metropolitan until we sort out efficient mechanics for delivering avocados further afield.

PLEASE WRITE ANY COMMENTS AND SUGGESTIONS DIRECTLY ON THE PAGES AND RETURN TO THE ADDRESS BELOW BY 10<sup>TH</sup> MAY AT THE LATEST.

We apologise for the short timeframe but we are hoping to incorporate all changes and complete the draft by 24<sup>th</sup> May. I am happy to respond to any enquiries either by email or phone.

Thank you for your interest in this project. To show our appreciation you will be invited to be in the first round of participating EC centres in Oct/November (or if you are not an ECC we will send you a kit when it is completed)

Kind Regards

Shelley Woodrow Consulting  
Project Co-ordinator  
[shelley.woodrow@gmail.com](mailto:shelley.woodrow@gmail.com)

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02 9973 3205

### APPENDIX 3. TRIAL EC CENTRES AND STAKEHOLDERS

Contact	Centre	Address
<b>NSW</b>		
Anne Ryan <a href="mailto:admin@tinytown.net.au">admin@tinytown.net.au</a>	Tiny Town CCC	Armidale
Lesley Mouton 02 6777 2117	Walch ECC	215 Uralla Rd Walcha NSW 2354
Trish Heeley <a href="mailto:director.erskinparkcc@penrithcity.nsw.gov.au">director.erskinparkcc@penrithcity.nsw.gov.au</a>	Erskine Park Early Childhood Centre	Crn Swallow & Peppertree Drive Erskine Park NSW
Diane Kristensen <a href="mailto:afcdiane@optusnet.com.au">afcdiane@optusnet.com.au</a> 02 6772 5300 0437 507 039 02 6772 6975 (h)	Family Day Care	Armidale PO BOX 951 Armidale NSW 2350
Tracey	Armidale TAFE ECC	Armidale
Vicki	Armidale TAFE ECC	Armidale
Annie Heckrath 02 6647 3129	Grafton	2952 Clarence Way Copmanhurst NSW 2460
<b>VIC</b>		
Marina Gavalas 03 9842 5992 <a href="mailto:catjump.kin@kindergarten.vic.gov.au">catjump.kin@kindergarten.vic.gov.au</a>	Catjump Preschool	88 Polaris Ave Doncaster East VIC
Fiona Sherlock 03 9807 9417 <a href="mailto:centremanager@ashwoodchildrenscentre.org">centremanager@ashwoodchildrenscentre.org</a>	Ashwood Children's Centre	8 Yoorulla St ASHWOOD VIC
Creina Porter 03 9635 5153	Diabetes Australia (Kids Go for your life)	100 Drummond St Carlton VIC
<b>QLD</b>		
Lisa Sonter Co-director	Mitchelton Kindergarten, Brisbane	56 Raven Court, Warner QLD 4500

## **APPENDIX 4.**

### **Potential collaborators identified:**

University of New England  
Catholic University, Early Childhood Education  
University of Western Sydney, Early Childhood Education  
Cancer Council and Diabetes Australia (VIC)  
Cancer Council NSW  
National Heart Foundation (state offices)  
KU NSW  
Departments of Education  
SA Dept of Education Early Childhood Unit  
Early Childhood Australia  
Gowrie Australia  
State Depts of Health – NSW  
TAFE Early Childhood  
Healthy Kids NSW

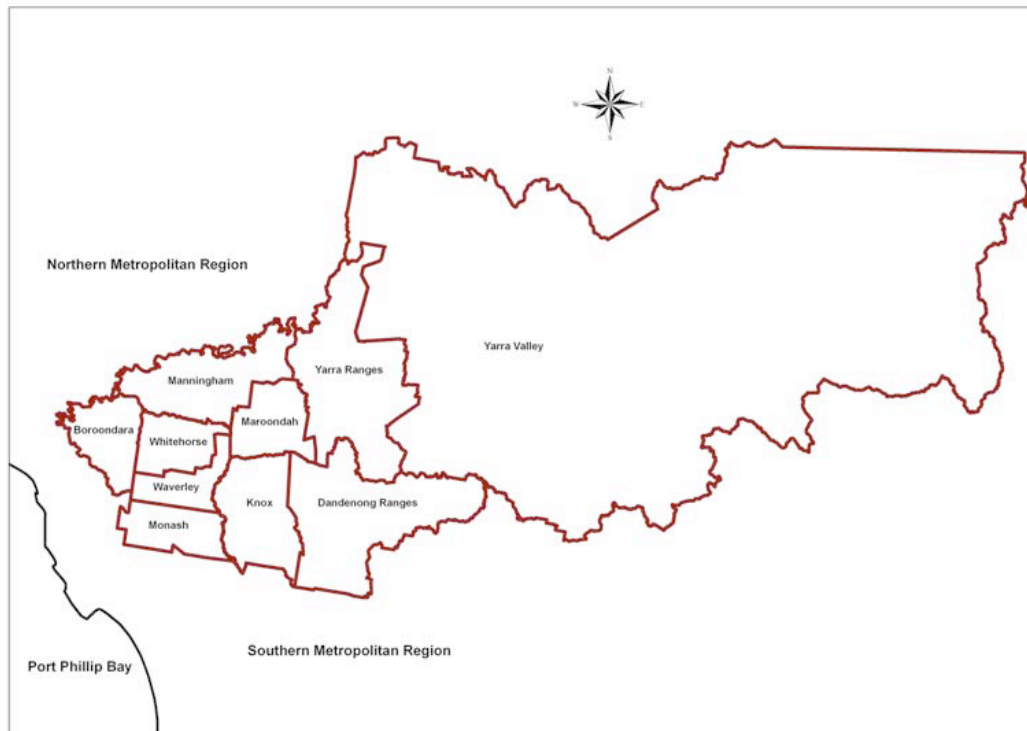
## **APPENDIX 5.**

### **EXAMPLES OF DEPARTMENTS OF EDUCATION REGIONS AND DISTRICTS**

**Each state has a number of educational regions and districts. These have different boundaries to local government**

#### **VIC Dept of Education Regions**

- Barwon South Western Region
- Eastern Metropolitan Region
- Gippsland Region
- Grampians Region
- Hume Region
- Loddon Mallee Region
- Northern Metropolitan Region
- Southern Metropolitan Region
- Western Metropolitan Region
- Eastern Metropolitan Region (see map below)



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## **QLD**

**There are now 10 regions and these regions are further broken down to 26 education districts.**

### **South Coast Region**

- Gold Coast District
- Logan-Albert Beaudesert District

### **Greater Brisbane Region**

- Brisbane Central and West District
- Brisbane North District
- Brisbane South District
- South East Brisbane District

### **Sunshine Coast Region**

- Sunshine Coast North District
- Sunshine Coast South District Moreton Region
- Moreton East District
- Moreton West District

### **Darling Downs-South West Queensland Region**

- Roma District
- The Downs District
- Toowoomba District
- Warwick District

### **Wide Bay-Burnett Region**

- Wide Bay North District
- Wide Bay South District
- Wide Bay West District

### **Fitzroy-Central West Region**

- Central Coast District
- Central Queensland District

- Central West District

### **Mackay-Whitsunday Region**

- Mackay-Whitsunday District

### **North Queensland Region**

- Mt Isa District
- Townsville District

### **Far North Queensland Region**

- Cairns Coastal District
  - Tablelands-Johnstone District
  - Torres Strait and Cape District
-

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## **NSW Dept of Education**

### **NSW Regions**

Please click on a region name to see information about that region

