

Final Report

Educational opportunities around perceptions of, and aversions to, vegetables through digital media

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Delivery partner:

Edible Adventures Productions Pty Ltd

Project code:

VG16018

Project:

Educational opportunities around perceptions of, and aversions to, vegetables through digital media – VG16018

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Funding statement:

This project has been funded by Hort Innovation, using the vegetable research and development levy and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

Publishing details:

ISBN 978 0 7341 4452 2

Published and distributed by: Hort Innovation

Level 8 1 Chifley Square Sydney NSW 2000

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Summary

Rationale behind this program

This project was commissioned to better understand the opportunities to improve attitudes to vegetables amongst children aged 8-12 and to develop digital classroom resources that support vegetable education. While parents are the gatekeepers to child vegetable consumption, primary school teachers are uniquely placed to integrate vegetable education into their classrooms, if they are provided with accessible solutions that fulfil their curriculum requirements – across subject areas of Science and Technology, English, the Arts, Health and PE, Maths and Humanities – with minimal demand for extra skills or time.

Methodology

This pilot project was divided into three parts: 1) Research 2) Development and 3) Implementation.

Part 1 - **Research:** Edible Adventures Productions (EAP) engaged the expertise of project partner Colmar Brunton (CBR) to carry out a knowledge audit, qualitative research and report. The research findings remained a constant reference-point from concept to release, so as to ensure that the outputs could achieve their intended purpose.

This research confirmed the case for development of the resources, identified key topic areas to address, delivery formats (online) and executional considerations (child-led) to help inform design.

Part 2 – Development: Four Elms Consulting (FEC) was commissioned by EAP to build a curriculum map that identified opportunities for vegetables to be integrated into the classroom via existing curriculum codes. This informed the springboard videos' pre-production process, feeding in to the creation of engaging segments that could support complementary lesson plans and activities, that were also developed in conjunction with FEC.

Part 3 – **Implementation:** EAP managed the production and post-production process for delivery of a broadcast-quality series. EAP worked with Love and Money (LAM) for branding, design, creative strategy, website build, and animation. Distribution of the project's assets were communicated to target audiences and stakeholders across nationwide print and online media (including NewsCorp and Fairfax), television and radio interviews (ABC News Breakfast, Ch 9, Ch 10), social media, conference presentations (PIEFA, Hort Connnections) and via key opinion leaders. The program was also selected as one of ten spotlight innovations in Victoria by global organisation HundrED, who discover, research and share scalable innovations in K-12 education.

Key outputs

- 25 webisodes embedded on a dedicated website.
- 50 downloadable PDF teaching resources for teachers of children aged 8-12 (year 3-6), consisting of activities and capsule lesson plans; each resource linked to at least one of the webisodes.
- Dedicated website (http://www.phenomenom.com.au) to house the above outputs.
- One long-form summary episode designed for inflight entertainment and to be screened on Qantas Inflight between September 2018 and February 2019.

Key Outcomes

The materials delivered as a result of VG16018 led to the following outcomes:

• Confirmed an appetite amongst the media, public and industry for new approaches to and alternative avenues for improving attitudes to vegetables in children.

• Designed and developed an innovative prototype for how vegetable education can be delivered by teachers, without special training or equipment, across multiple curriculum areas.

Recommendations to the industry for future education initiatives...

The insights generated from this project pave the way for the Australian horticultural industry to continue to integrate vegetable education into the classroom through digital media. Furthermore, there is potential for cross-sector partnerships to expand the scope and reach of this pilot approach, and ensure that attitudinal shifts to vegetables, and food in general, translate into increased vegetable intake, sales and health and wellbeing.

In the immediate term, further research is recommended to evaluate the impact of the materials once they have had sufficient time in the market to influence school-aged children, their teachers, parents and caregivers.

There is scope to build on the existing Phenomenom brand and assets and move closer to larger-scale attitudinal shifts in our target audiences through:

- Expansion of distribution channels including industry and broadcaster partnerships in order to reach larger audiences.
- The creation of additional resources to further explore topics and creative devices identified in the research phase.
- Cross-industry application of methodology in other contexts (eg. fruit, nuts, unlevied vegetables)
- Expanding delivery formats to include elements of gamification, interactivity, competitions and live events.
- Evaluating the impact of the materials once they have had sufficient time in the market to influence 8-12 year-old children, their teachers, parents and caregivers.
- The inclusion of materials targeted towards parent and caregiver attitudinal change, who are the gatekeepers of child vegetable consumption.

Keywords

Education; Phenomenom; vegetables; children; health; teaching resource; nutrition; Australian curriculum

Introduction

Australia's horticulture industry identified the need for new and innovative approaches to improve children's attitudes to vegetables. Through Edible Adventures Productions (EAP), Alice Zaslavsky was contracted by Hort Innovation to better understand opportunities for digital education initiatives to improve attitudes to vegetables among children aged 8-12, their teachers, parents and caregivers, and develop digital classroom resources to improve education around vegetables.

The latest National Health Survey shows that only 5.4% of children in Australia are meeting the Australian Dietary Guidelines for serves of vegetables (ABS, 2014-2015). This is consistent with findings from Project Harvest in 2015 (VG12078) that showed children are eating approximately 1.8 serves per day, well below the recommended guidelines. Despite the low consumption levels, both parents and teachers are strongly in favour of encouraging children to eat more vegetables.

While there is an array of teaching resources on promoting better attitudes to food currently available for use in Australia, the messages taught through these materials are heavily focused on ensuring children understand the need to eat a healthy and balanced diet. Project Harvest also identified that Millennials (which includes children aged 8-12) are not encouraged to increase consumption of healthy foods through long-term health messaging; rather that they want to see immediate benefits.

This project will contribute to Consumer Alignment priorities from CSIRO's 2015 Australian Vegetable Strategic Investment Plan (SIP) for the vegetable industry to increase children's consumption of vegetables (VG13090).

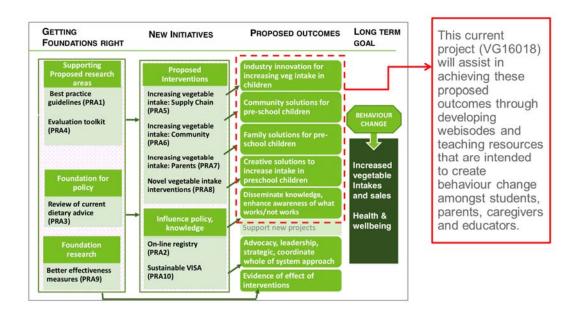


Figure 1. CSIRO SIP for the vegetable industry to increase children's consumption of vegetables (VG13090)

The Hort Innovation reference projects include CSIRO Vegetable Education Project (VG15005) and Veggycation (VG12034). Other major vegetable education initiatives Australia-wide that provide more specialized food education opportunities include kitchen garden programs such as Stephanie Alexander Kitchen Garden Foundation (SAKGF) and skills-based initiatives such as Oz Harvest's Food Education and Sustainability Training (FEAST) and Jamie Oliver's Learn Your Fruit and Veg (LYFV).

While shown to be effective, most existing initiatives in food education rely on trained facilitators and/or require teachers and schools to make extra room in a curriculum that is often overcrowded. Primary school teachers have a curriculum framework, but how they choose to administer individual lessons or unit-long projects is left to their discretion. Time constraints aside, teachers are constantly on the look-out for high quality digital resources to engage their students.

As a flow-on effect of education and exposure to vegetables across subject areas including Science and Technology, English, the Arts, Health and PE, Maths and Humanities, this educational program makes it possible to improve perceptions of and attitudes towards vegetables among children, their teachers, parents and caregivers, translating into benefits for consumer health and industry engagement and ultimately, purchasing and consumption.

In April 2017, Hort Innovation commissioned Alice Zaslavsky, through her production company, Edible Adventures Productions, to better understand the opportunities to improve attitudes to vegetables amongst children aged 8-12 and to develop digital classroom resources that support vegetable education (VG16018). This report summarises the methodology and program design and presents the findings, as well as some recommendations.

Methodology

To account for the continuous updates in knowledge and new ideas, this pilot project was divided into three parts: 1) Research, 2) Development and 3) Implementation.

A project logic planning workshop conducted with project partners Clear Horizon (CH) and CBR on 11 May 2017, clarified and documented intended outcomes and assumptions while providing a rationale for the prototyping that would take place as the project evolved (Appendix 1). The program logic provided a clear pathway that showed how this educational program could improve perceptions of and attitudes to vegetables among children, their teachers, parents and caregivers, and how such a change would translate into benefits for consumer health and industry engagement and ultimately, purchasing and consumption.

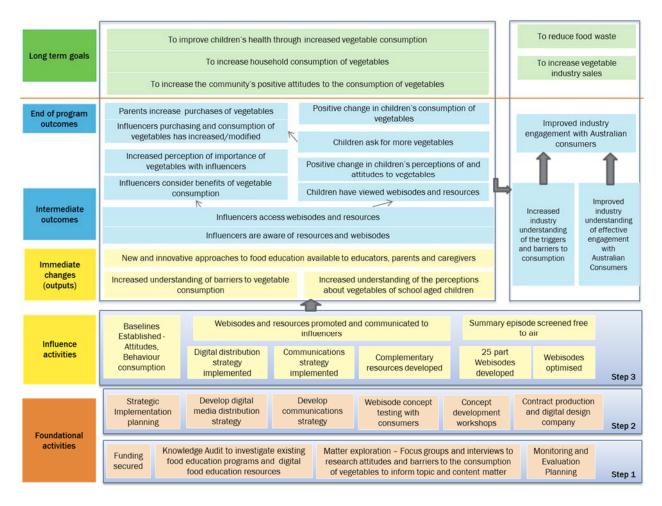


Figure 2. Clear Horizon's program logic from Appendix 1

Part 1 - Research

- To identify subjects/topics and trends in food education programs both locally and globally.
- To understand how current subjects/topics are currently incorporated and delivered in food education programs.
- To gain in-depth understanding of target market needs, desires, motivations and limitations of utilising food education programs. This included development and testing of refined concepts/ideas.
- To achieve absolute clarity on optimised concepts so EAP could easily move forward into development of the food education program.

CBR were engaged, at the commencement of the project in May 2017, to 'understand and uncover how to create behaviour change amongst the target audience of educators, parents, caregivers and children – so that undesirable behaviours are reduced in favour of desirable behaviours - increasing engagement with and consumption of vegetables.' They utilised a four-stage project flow to discover, explore and guide the project to achieve its intended outcomes.

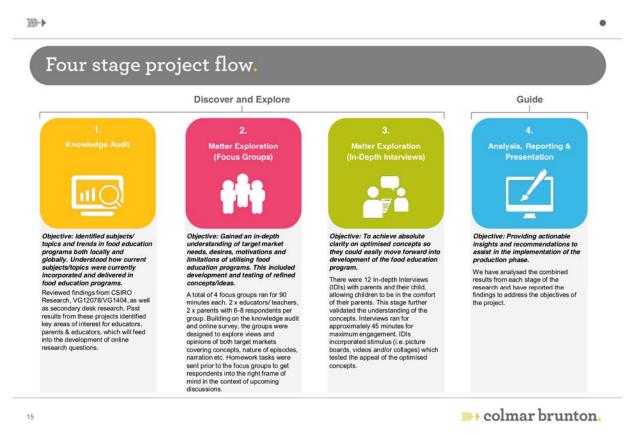


Figure 3. Colmar Brunton's 'four stage project flow' from Knowledge audit (Appendix 1)

A knowledge audit (Appendix 2) was undertaken to identify the current state of play in food education programs both locally and abroad, including key areas of interest for educators, parents and the children themselves. These findings then fed into online research questions to inform the qualitative component.

The qualitative component consisted of 4 focus groups of 90 minutes each (2 groups N=8 parents and 1 group of N=5 primary school teachers and 1 group of N=8 early secondary school teachers) designed to explore views and opinions of both target markets covering concepts, nature of episodes, modes of delivery and effective methods of communication. Optimised concepts as a result of these focus groups were tested in 12 in-depth interviews with children (aged 7-13) and their parents, with each interview running for 45 minutes. The results of CBR's qualitative research (Appendix 3) provided EAP with an in-depth understanding of the target markets and actionable insights and recommendations to implement into a vegetable education program.

Below is a summary of CBR's key findings from their qualitative report (Appendix 3):

Key Insight	Summary
Children and vegetables	While attitudes and behaviours vary, the tendency of some children to minimise their vegetable consumption is a common issue. Barriers include dislike of sensory characteristics, unfamiliarity and a general preference for less healthy foods. Both parents and teachers are strongly in favour of encouraging children to eat more vegetables.
Teaching about vegetables	Informal teaching about food and vegetables takes place both at home and at school in the form of conversations about eating habits. While teaching about food or vegetables is not a required part of the curriculum, there is scope for teachers to incorporate this topic across a variety of subject areas.
Opportunity for proposed resource	Teachers are not currently using resources specifically aimed at teaching children about vegetables or encouraging vegetable usage. There is therefore potential to introduce such a resource, especially if it can be used to aid teaching in required areas.
Three key topic areas were identified	Familiarisation and usage, health and nutrition, and provenance. Within these broad areas there are a number of specific questions and sub-topics. Most of the ideas generated are fairly general and simple. However, there is an openness to less obvious topics (e.g. Indigenous vegetables) when these are introduced.
Executional considerations	Creative execution of the resource will be key to generating engagement and fostering learning. There is a preference for a high level of interactivity and multiple platforms including games and facility to share or compete with others. Use of humour, music, a simple message and the presence of children their own age will aid communication. Step by step demonstrations, real world examples and/or compare and contrast scenarios are effective teaching strategies.
Presenter	Alice is generally considered to be a suitable presenter for the series. This is particularly true when she is seen wearing brightly coloured clothes and emphasising an energetic, enthusiastic personality. However, an animation or fictional character is often spontaneously envisaged as presenter, particularly if aiming at younger children. The combination of Alice and a character is likely to be effective, particularly as this allows for interaction. Inclusion of children in the target age group would also help students to identify with the message.

Part 2 – Development

- To formulate a plan for the web series based on actionable recommendations from Colmar Brunton's initial research.
- To decide on locations, scripts and storyline for the web series to ensure that it would fulfil the goal of behaviour change among the target demographic.
- To ensure that the web series reaches the desired audience figures.

At the commencement of this stage, CBR's findings were further refined with a workshop on 19th June 2017 (Appendix 4) involving EAP and members of production, distribution and stakeholders within Hort Innovation.

Discussed were key findings and next steps, including specific creative and delivery methods for each topic in the development of the educational resource(s). Key topics were further broken down into the following themes:

- Benefits for the body and the mind.
- Vegetable varieties around the world, including Australian Indigenous vegetables.
- Familiarisation & usage.
- Provenance & waste.
- Creative innovation in the vegetable industry.

Project Reference Group (PRG) and stakeholders within Hort Innovation joined EAP in the first PRG teleconference on 30th June 2017 (Appendix 5) to add their expertise and experience to the rich collection of qualitative insights from CBR and development of the resource(s).

A Curriculum resource map was developed by FEC (Appendix 6), that detailed which learning areas, subjects, and learning outcomes would be addressed by the resources and webisodes. The map was generated in line with Colmar Brunton's findings and collection of key topics identified in the 19th June 2018 workshop (Appendix 4). This also ensured that the target year levels (year 3-6) and learning areas were equally covered, so that resources would be genuinely useful to teachers. Additional work entailed making sure the metadata and design of the resources would make these Australian Curriculum links clear and accessible, such as inclusion of the year level, learning area, descriptor, cross-curriculum priority/ies and Australian Curriculum code on every resource.

Topics

Topics were broken up into 5 categories to align with subject areas referenced in the curriculum:

- Super Humans Health and Physical Education
- Legends History & Culture
- Super Natural Science Science, Technologies & Mathematics
- Eco Logic Sustainability & Geography
- Good Chat English & Language

This provided the basis for production of the webisodes and resources, with a total of 5 webisodes and 10 downloadable PDF resources per subject area.

Creative Development

Production values were informed by current trends in children's media consumption, including a preference for shorter segments, non-linear narratives, use of animation, music, and the presence of children their own age. This information was reinforced by experts presenting at the Children's Media Symposium in December 2017, which the project leader and Curriculum Specialist participated in.

LAM'S brand guide (Appendix 7) documented the values and priorities of the project's creative execution. Further creative development heavily referenced the major target audiences for the materials. EAP's primary target audiences of teachers and children aged 8-12 Australia-wide were further segmented into personas by CBR (Appendix 8), based on their qualitative research. The two target groups in particular were forward-thinking primary school teachers and slightly older children.



300×

Liz Forward Thinking



Gen V: The Vegetable Revolution

Gen V: The Vegetable Revolution provides Forward Thinking Primary School Teachers with a classroom resource that is customisable, interactive and engaging This resource puts a spin on vegetables in a way that makes it more than just a healthy food.

In the morning while I tick off the class role, I ask the kids what they ate for breakfast. It is essential that they understand the importance of eating breakfast as this will give them the brain fuel to get them through the morning. We start the day off with a snap quiz on the Kahootz app, this is time for the kids to get the excitement out of their systems before we really get into the swing of things. Maths and English are usually taught in the mornings, and kids tend to be quite focused at this time. At around 10am, we all bring out our fruit and vegetable snacks as part of the school's healthy snacking initiative. We encourage them to snack in class while they learn.

Our whole year level of teachers closely work together to design lesson plans that maximise learning and engagement. I pride myself on my classes which I believe are interactive and well thought out. We always look for the latest teaching methods and resources online. We share them around and bounce ideas off each other, knowing that a lot of what we teach in class will be shared at home. The parents give us extremely positive feedback, and they say that they are also learning new things from their kids all the time! The children are immensely proud of themselves and brag in class when they teach their parents something new!

iPads are now standard in all of our classrooms. We try to find a healthy balance so that the kids do not have too much screen time. The iPads are great for playing interactive learning games or looking for information online. We find that the kids learn much quicker when we use iPads than when we hand out worksheets, the level of engagement is quite different.

Currently we are designing our own cookbook. All the kids must come up with a recipe which contains at least three vegetables. They will then have to cook it at home with their parents, take a picture of it and then add it into the cookbook. The homework task tonight is to talk to their parents about what dish they should cook. They will report back to me tomorrow with some great ideas!

Forward Thinking Teachers		
Audience	Forward Thinking Primary School Teachers	
Age	≈ 28-45 years old	
Millennium Monitor Era	Rebellion	
Teaching Philosophy	Each student has the potential to bring something unique and special to the world. It is important for these teachers to maximise fun and engagement in class whilst teaching important life lessons. This is achieved through creating an atmosphere that sparks curiosity and sheer determination.	
Information Sources	Online resources, new teaching methods, other teachers	
Barriers	Resources that are not engaging for children and/or do not follow the school curriculum	
Likely to be engaged by	Hands on resources, teaching current topics, interactivity	

>> colmar brunton.

Figure 4. Forward thinking teachers from Colmar Brunton's Personas (Appendix 8)





Gen V: The Vegetable Revolution provides older children with fun and engaging content that can be accessed both at home and school. The interactive resource will encourage children to take action and eat vegetables because they want to, not because they have to.

As soon as I wake up I have porridge and fruit while scrolling through Facebook & Instagram. Ms. Morgan asks us every morning what we ate for breakfast, so I have to try and impress her. We had a quick game of Kahootz to start the day, which is always fun! Today's topic was about music, and I won!

After this, we had story writing time. Ms. Morgan tells us it is important to concentrate for this so we are not allowed to talk to each other. But, she lets us snack on fruit and vegetables. Mum always prepares carrot and celery sticks for me which I have learnt to like more and more over time.

For lunch I ate a chicken and salad roll. It had beetroot in it which I like, but my younger brother hates it! I'm quite bored of the food in the school canteen, but I heard that high school canteens are way better and there are plenty of options to choose from! There are also microwaves so I can heat up food. Mum says she will make extra dinner so I can take it to school the next day.

I have soccer training after school today. I want to be a professional soccer player when I grow up which means I need to be fit, healthy and have big muscles. Dad tells me spinach will make my muscles grow so I ask Mum and Dad to buy it whenever they go grocery shopping.

For dinner we are having stir fried veggies with chicken & rice. My friends Justin and Chloe are making homemade pizzas tonight, I'm telling mum that we should do this soon as well! When I finish my homework, I will watch the rest of MasterChef with the rest of my family, but I am normally scrolling on my phone at that time as well. I recorded Australian Ninja Warrior to watch afterwards so I can talk about it with my friends at school tomorrow. We're obsessed!

Older Children		
Audience	Older Children	
Age	12-14 year olds	
Millennium Monitor Era	Conformity/Rebellion	
Information Sources	Friends, Social Media, YouTube, Parents, Teachers & Television	
Favourite Games	PlayStation, Nintendo, iPhone/iPads apps (i.e. Pokémon Go), Minecraft, Sims	
Favourite School Games	Word Connect, Kahootz, Roblox	
Favourite Educational Shows	Osmosis Jones, Horrible Histories, MythBusters, War on Waste, Behind the News, Deadly 60	
Barriers	Limited by what parents eat and teach	
Likely to be engaged by	Games, technology, interesting content/information	

colmar brunton.

Figure 5. Older children from Colmar Brunton's Personas (Appendix 8)

Forward-thinking teachers offered the highest potential for uptake and spread of materials to their colleagues and peers. Their desire to find new online materials to engage their students, coupled with their drive to maximise fun and engagement in class, makes them the perfect ambassadors for the program. The materials were targeted towards slightly older children (10-14 years), as CBR's teacher insights highlighted that younger children (6-10)

prefer to engage with material that is made for an older audience.

Distribution Plan

A distribution plan was developed to reach 20,000 teachers of year 3-6 nationally over 12 months (Appendix 9). The plan was multi-faceted, with the audiences identified, proposed methods of engagement and the key messages associated.

On a broad level, by removing the typical barriers of cost and time associated with lesson-planning and with its high-quality production values to maximise engagement with students, the research-led design of the program was seen as a key asset to achieving widespread uptake from teachers.

Being a digital program, it was identified that digital communications would be essential to reaching target audiences, with direct digital marketing especially a key factor in enhancing uptake. However, strict no marketing policies with the Vegetable Fund excluded this approach, so the distribution strategy relied heavily on mainstream, educational and parenting media, social media (unpaid), search engine optimization (SEO), conference presentations and partnerships with individuals and organisations with shared goals. Ultimately, it was likely that the materials would take some time to disseminate to teachers, and that word-of-mouth would be the most effective mechanism for getting new teachers to use the resources. By targeting forward-thinking teachers, it was thought that they would then share materials to other teachers within their school and wider teaching networks.

Pre-production

As production drew closer, pre-production research was carried out including seeking further information on interview subjects, potential for scripted skits, locations, engaging experts and narrative opportunities.

CBR's qualitative report recommendations were continually referenced to ensure that the content was supported by the research. LAM'S creative direction document (Appendix 10), which was informed by CBR's findings, provided parameters for the look and feel of the series, as well as the PDF resources.

The series, titled Phenomenom, is set in a classroom of the near-future and follows six 'Super Natural' children aged 10-14 as they learn about the history, culture and health benefits of vegetables via scripted skits crossing from live action to animated worlds, documentary-style interviews and un-scripted in-classroom scenes. Alice Zaslavsky appears as their 'teacher' who facilitates their learning adventures, however much of the material is driven by the children themselves. Phenomenom uses the creative devices recommended in Colmar Brunton's qualitative report, including simple messages, live-action, animation, characters, humour and music, in snackable segments.

Scripts were developed for many of the segments (Appendix 11) and were subject to Hort Innovation approval prior to filming taking place. Other segments were approached in a more documentary style, to allow for authentic learning experiences alongside the children on screen.

A production schedule was developed according to child-employment requirements, location considerations and availability of guest expeirts, who donated their time to appear on the program.



Image 1. Illustrated cast of Phenomenom

Part 3 - Implementation

- To deliver the major output.
- To fulfil the goals of the pre production, distribution strategy and content for accompanying web resources.
- To oversee the cut of the footage to ensure that the aims of the research phase are fulfilled.
- To land the 25 webisodes and longer-form episode on their relevant platforms.
- To ensure that the distribution plan is implemented and a success.
- To develop findings and recommendations for future Hort Innovation projects.

The production and distribution of the main project outputs were carried out in part 3.

Filming of the webisodes took place in Victoria over 4 weeks through November and December 2017 and involved a number of experienced production team-members including director, supervising producer, director of photography, sound recordist and chaperone for the children.

Due to child-employment restrictions and to minimize costs, filming was restricted to within 1.5 hours of Melbourne's CBD.









Images 2-5. Behind the scenes photos (credit: Philip Myers)

Expert Guests

Some of the material filmed involved experts in childhood and sport nutrition, taste, consumer psychology, farming, the Arts and cooking, while high-profile guests from athletics, Australian Rules Football and television provided insights on how vegetable consumption has helped them be successful in what they do. This positive role-modelling as a common thread throughout the series was designed to resonate with school-aged children, their teachers, parents and caregivers alike.



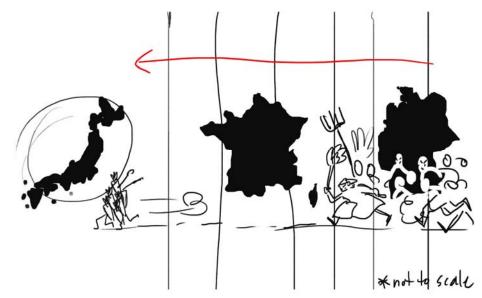


Images 6-10. Some of the expert guests who featured on the program (credit: Philip Myers)

Animation

Dual live-action and animation segments required the presence of the animators on set, who contributed their expertise to ensure that the correct scene constructions occurred in order for them to carry out their work in post-production.

As filming was completed, storyboarding for animation and early edits commenced.



ACTION: Screen split into 3 with the flags behind them – Japan, France, Germany. And we see carrots with legs running away from Medieval people with pointy shoes DIALOGUE:

Figure 6. Storyboard of a scene from The One with the Little Carrot Dude

Resource refinement

Further refinement of the teaching resources took place in response to the materials filmed. Website wireframes were developed to support the content produced according to the outputs and subtle changes in tone, language and material from original planning that was captured during filming. Updates to content and plans for roll-out were provided and confirmed with representatives from Hort Innovation at a meeting on 21st December 2017.

Post production

Post production involved editing, sound engineering, colour grading, visual effects, music composition and recording, animation (2D, overlay and text supers) and final online export process for all 25 webisodes and long-form summary episode, with the approval of Hort Innovation. The website was built as a mechanism to distribute the resources. Illustration and animation elements were incorporated into the webisodes, resources and website.

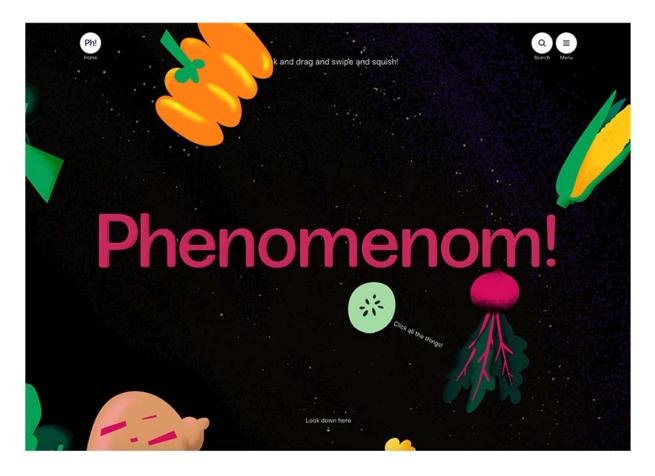


Image 11. Phenomenom website homepage

Pre-release PRG

A second PRG teleconference on 6th December 2017 (Appendix 12) was conducted to help guide a plan for securing a distribution platform for the webisodes. In choosing a platform to land the webisodes, it was important that the platform would:

- Be freely available for anyone in Australia to access.
- Fit within Hort Innovation Vegetable Fund charter prohibiting marketing of vegetables.
- Allow embedding on the phenomenom.com.au website.

ABC Children's was identified as an appropriate distribution partner. The first round of discussions were held in August 2017 with a supervising executive producer of entertainment and development who expressed interest in the series and would contact the relevant representatives from ABC Children. Follow-up discussions were conducted with a representative from ABC Education in December 2017. Discussed was the licensing of some or all of the webisodes for screening on their iView and YouTube platforms, with the supporting resources to be available on ABC Education's resource portal. A proposal was submitted to ABC acquisitions department in March 2018 according to their submission guidelines. The acquisitions team declined the series in May 2018 via email, with no further explanation given.

To maximise exposure and to monitor the usage of the Phenomenom webisode content, YouTube was chosen as the delivery mechanism, due to its universal and stable platform, advanced search functions and its allowance for embedding of the video content on Phenomenom's website (https://www.phenomenom.com.au). This is consistent with CBR's qualitative report (Appendix 3, page 46) which demonstrated that YouTube is a key platform in use by the target audience of 8-12 year olds, and one that many teachers use to access relevant educational content in video form, allowing for curriculum codes to be tagged and searchable.



Image 12. Screenshot of webisode embedded on Phenomenom website.

A release schedule for Phenomenom was set at 2 webisodes per week during school terms 2 & 3 2018. The gradual addition of videos over months was seen to have the best chance of enhancing uptake by teachers and building momentum.

A third and final PRG teleconference (Appendix 13) was held on 19th April 2018 to identify and discuss potential opportunities to support the distribution plan.

Release

A media matrix (Appendix 14) was developed in collaboration with the Hort Innovation communications department. This was a central element to the launch distribution plan in the absence of any paid marketing. The aim of the media matrix was to identify, contact and communicate with the various outlets, publications, and influencers in mainstream, teacher, and grower-facing media and to provide them with a compelling reason to publicise the many news and feature-worthy elements of the program. The platforms included print and online news, mailing lists, social media, television, radio and podcasts.

This strategy was implemented in the weeks and months before and after release, in tandem with the other distribution activities identified in planning including conference presentations (Primary Industries Education Foundation Australia 2018 Conference and Hort Connections 2018).

Google Analytics was used to monitor website traffic, resource downloads and YouTube's content management system (CMS) was used to monitor webisode views.

Outputs

At every stage of the project, materials have been completed and delivered to Hort Innovation stakeholders and the PRG. All outputs (except for the long-form summary documentary) can be viewed on the following dedicated website in-full, by 15th August 2018 (also an output): https://www.phenomenom.com.au

Outputs delivered:

- 25 webisodes embedded on a dedicated website. Each webisode provides springboard material to one or more curriculum-aligned PDF teaching resources.
 - The master copies of the 25 webisodes have been provided to Hort Innovation on a USB hard drive.
 - Also available for download on phenomenom.com.au are the transcripts of each webisode.
- 50 downloadable PDF teaching resources for children aged 8-12 (year 3-6), consisting of activities and capsule lesson plans. Each resource has the year level, learning area, descriptor, cross-curriculum priority/ies and Australian Curriculum code tagged. Each resource springboards from at least one of the webisodes.
 - The 50 PDF teaching resources have been provided to Hort Innovation on a USB hard drive.
 - Due to changes in regulations, submission to Education Services Australia is no longer required.
 - An application to land the resources on authoritative aggregation platform, Scootle, is no longer relevant due to the anticipated closure of the site.
- Dedicated website (https://www.phenomenom.com.au).
- One long-form summary episode (as outlined in VG16018 MS 102 Part 3), designed for screening on mainstream media streaming service such as Qantas Inflight entertainment. EAP has been able to secure an agreement between Qantas' distribution partner, Global Eagle Entertainment and Hort, to screen the episode on their 'Kids Zone' feature between September 2018 and February 2019.
 - The master copy of the summary episode has been provided to Hort Innovation on a USB hard drive.
- Final Report (this document), delivered on 23rd July 2018 providing an overall summary of the project.



Image 13. Example episode page from website



Image 14. Example PDF resource from website

As part of the dissemination of the resources, a media release from Hort Innovation 'Getting kids excited about eating vegetables' was issued on the 14th May 2018 (https://horticulture.com.au/getting-kids-excited-about-eating-vegetables).

Print, online and newsletters

On launch, a number of articles were published either directly or indirectly about the resource, with the following list accounting for all known articles published on or before 30th June, 2018.

Profile articles

Quinn, K. (2018, May 13th). 'Alice's adventures in Vegieland: MasterChef alumna's biggest challenge' Sunday Age, Fairfax. Retrieved from

https://www.smh.com.au/entertainment/tv-and-radio/alice-s-adventures-in-vegieland-masterchef-alumna-s-biggest-challenge-20180510-p4zeix.html#comments

Print - Sunday Age 115,056 audience.

Online – Sydney Morning Herald 953,000; Good Food 1,564,786 Unique Monthly Visits (UMV).

Stock, D. (2018, May 15th). 'Plant a seed: New series turns kids eating their greens into content gold' Herald Sun, News Corp. See Appendix 15, page 1.

Print – 303,140 audience.

Scarr, L. (2018, May 26th). 'Kids vegetable crisis: Children refusing veggies more than ever' News Corp syndicated nationally. See Appendix 15, pages 2-25. Retrieved from

 $\frac{https://www.heraldsun.com.au/lifestyle/health/kids-vegetable-crisis-children-refusing-veggies-more-than-ever/news-story/994f667a61be9ec078ab08f856f89ccc$

Print – Herald Sun 303,140; Courier Mail 135,007; Daily Telegraph 232,067; Daily Examiner – Grafton 3,472; Northern Star – Lismore 6,950; Daily Mercury – Mackay 7,738; Fraser Coast Chronicle – Maryborough 5,645; Gympie Times 2,997; News - Mail – Bundaberg 6,176; Chronicle – Toowoomba 14,015; Gladstone Observer 3,301; Weekend Gold Coast Bulletin 21,468; Morning Bulletin – Rockhampton 9,376; Townsville Bulletin 16,484; Sunshine Coast Daily – Maroochydore 10,046 audience.

Online - Herald Sun 26,304,000 UMV.

Beaumont, M. (2018, June 26th). 'Alice Zaslavsky's Food Education Phenomenom' Broadsheet Melbourne. Retrieved from

 $\underline{\text{https://www.broadsheet.com.au/melbourne/food-and-drink/article/phenomenom-alice-zaslavskys-food-education-phenomenon}}$

Online - TBC UMV.

Staff (2018, June 7th). 'Phenome-NOM' Canberra Weekly. See Appendix 15, pages 25-26.

Print – 43,478 audience.

Staff (2018, May 25th). 'The Round Up' Rural Weekly Northern Territory/NSW/QLD/Central QLD. See Appendix 15, page 27.

Print – Northern Territory 9,569; NSW 27,334; QLD 36,876; Central QLD 29,641 audience.

Staff (2018). 'Getting kids excited about eating vegetables' Northern Valleys News. See Appendix 15, page 28.

Print – 6,000 audience.

Staff (2018, May 17th). 'Hort Innovation launches veggie campaign' Stock Journal. Retrieved from

https://www.stockjournal.com.au/story/5406145/hort-innovation-launches-veggie-campaign/

Staff (2018, May 14th). 'Phenomenom campaign to get kids excited about eating veggies' AUSVEG. Retrieved from https://ausveg.com.au/articles/phenomenom-campaign-get-kids-excited-eating-veggies/

Staff (2018, May 14th). 'Getting kids excited about eating vegetables' Horti Daily. Retrieved from

http://www.hortidaily.com/article/43203/Australia-Getting-kids-excited-about-eating-vegetables

Article mentions

Gagnon, A. (2018, May 31st). 'Blaming parents for childhood obesity is lazy' Courier Mail, News Corp. Retrieved from

 $\frac{https://www.couriermail.com.au/rendezview/blaming-parents-for-childhood-obesity-is-lazy/news-story/01708734de911ef3e870f4be52e7b7f6$

Stock, D. (2018, June 12th). 'Russian Around' Herald Sun, News Corp. Retrieved from

 $\frac{https://www.heraldsun.com.au/sport/football/world-cup/russian-around-kick-back-with-winning-world-cup-couch-snacks/news-story/8db02ab82f2a947cc4f23dc14111089e?login=1$

Print - Herald Sun 303,140, Mercury (Hobart) 28,265.

Staff (2018, June 28th). Website profile. Retrieved from

http://www.flowerdalefarm.com.au/chefs/alice-zaslavsky

UMV not available.

Primary Industries Education Foundation Australia (PIEFA) Newsletter, June 25th 2018. Retrieved from

https://mailchi.mp/primaryindustrieseducation/piefa-newsletter-june-2018?e=6445d286c0

Subscribers not available.

Flowerdale Farm News, June 28th 2018. Retrieved from

 $\frac{\text{https://us5.campaign-archive.com/?e=&u=ad2c4b6516582465e6251d26b\&id=4ecc9dfd0f}}{\text{Subscribers}-2,000}.$

Television

Television appearances were conducted with Alice Zaslavsky and a number of the child actors involved in Phenomenom to help increase awareness of the program.

Trioli, V. & Rowland, M. (Hosts). (2018, June 7th). News Breakfast, Australian Broadcast Corporation. Retrieved from

https://youtu.be/McYZQckKPTc

Viewers - 145,000.

Nixon, L. (2018, July 29th). Postcards, Channel 9. Retrieved from

https://www.9now.com.au/postcards/2018/clip-cjjhz25nn000w0gp7speco5yz

Crawford, S. & Phillips, L. (2018, July 29th). Kids' WB, Channel 10.

Radio and podcast

A number of radio interviews were also conducted with project leader, Alice Zaslavsky, with Phenomenom either as the focus or mentioned as part of the interview.

Epstein, R. (Host). (2018, May 15th). ABC Radio Melbourne, Australian Broadcast Corporation. Retrieved from

http://www.abc.net.au/radio/melbourne/programs/drive/foodietuesday-vegies-for-kids/9764236

Maberly, C. (2018, May 18th). Rural News Report, Australian Rural Communication Network. Retrieved from https://soundcloud.com/alice-in-frames/rural-outlook-15-05-2018/s-IFkZz

O'Brien, J. (2018, May 18th). Rural Focus, Southern Cross Austereo – various stations nationwide. Not recorded.

Mehigan, G. (2017, October 30th). 'Alice Zaslavsky & peeling behind the curtain' A Plate To Call Home, PodcastOne Australia. Retrieved from

https://www.podcastone.com.au/episode/Alice-Zaslavsky--peeling-behind-the-curtain

Resource websites

The following websites either house, will house or have expressed interest in housing the Ph program on their own platform.

Primezone: Primezone provides teachers with single-point access to a range of primary industries education resources. This website is an initiative of the Primary Industries Education Foundation Australia.

http://www.primezone.edu.au/item details.php?item id=517&item type=resource&content list id=2

ClickView: ClickView provides thousands of quality educational videos designed for primary schools, which are accessible through their own platform. ClickView have expressed interest in licensing the materials for use on their platforms, however this is subject to Hort Innovation approval (Appendix 16, page 1).

https://www.clickview.com.au/k-12-primary/

Conferences

PIEFA Conference 1st May 2018. Canberra. Project leader Alice Zaslavsky presented Ph to an audience of 100 people interested in educational opportunities for primary industries.

http://www.piefa.edu.au/uploads/9/8/9/8/98986708/piefa program inprogress3.0.pdf

Hort Connections 20th June 2018. Brisbane. Project leader Alice Zaslavsky hosted a future foods panel at Hort Connections to an audience of 200 people. She used this as an opportunity to talk about Ph as an innovation in the food education space. Retrieved from

https://ausveg.com.au/articles/hort-connections-food-trends-panel-shines-light-future-vegetable-products/

Educhange Conference 2nd October 2018. Deakin Edge, Melbourne. Project leader Alice Zaslavsky will be a keynote speaker and present Phenomenom.

http://www.educhange.com.au/speakers/alice-zaslavsky

Australian Association for Environmental Education Conference 21st October 2018. Gold Coast. 'Phenomenom For Change' workshop to be conducted with teachers (Appendix 16, page 2).

http://www.aaee.org.au/events/aaee-conference-2018/

Awards

HundrED inclusion in the Victorian Education Innovation Spotlight for 2018 (Appendix 16, page 3).

https://hundred.org/en/innovations/phenomenom?filter=posts

Australian Teachers of Media (ATOM) awards 2018. Entry for best Educational Tool (Primary) with awards announced on 12th September 2018 (Appendix 16, page 4).

http://atomawards.org/

Connections

VHEE

Email out to 284+ email accounts connected with VHEE on 28th May 2018 (Appendix 16, pages 5-6).

Acheivement Program

About: 'Developed by the Victorian Department of Education and Training in partnership with the Department of Health and Human Services, the Achievement Program is a simple, evidence-based framework to support whole-organisation health and wellbeing approaches for early childhood services, schools and workplaces.'

http://www.achievementprogram.health.vic.gov.au/

• Meeting with Education Coordinator who drafted a document to include Phenomenom as part of their offering to Victorian schools to align with the relevant benchmarks (Appendix 16, page 9).

Sandro Demaio foundation

About: 'Developing disruptive, new solutions to improve the health of all Australians, with a focus on food.'

https://www.sandrodemaiofoundation.org/

• Meeting with heads of Sandro Demaio Foundation on 26th June 2018 to discuss potential for partnership with Ph and help with distribution to their networks (Appendix 16, page 8).

Nutrition Australia

About: 'Nutrition Australia is a non-government, non-profit, community based-organisation with offices throughout Australia. Nutrition Australia is an independent, member organisation that aims to promote the health and wellbeing of all Australians.'

http://www.nutritionaustralia.org/

• Email response on 28th May 2018 from Clare Fargher (Partnerships & Engagement) congratulating Alice on the program and wanting to meet to discuss potential for collaboration (Appendix 16, page 7). Subsequent meeting on 5th June 2018 to discuss potential for collaboration.

YouTube Kids

About: 'YouTube Kids is a video app that provides a version of the service oriented towards children, with curated selections of content, parental control features, and filtering of videos not deemed to be appropriate to the target audience.'

https://kids.youtube.com/

 Meeting with head of YouTube Kids content partnerships APAC on 9th May 2018 to further explore opportunities for distribution and collaboration.

Stephanie Alexander Kitchen Garden Foundation (SAKGF)

About: 'Pleasurable food education teaches Australian children positive food habits through fun, hands-on learning.'

https://www.kitchengardenfoundation.org.au/

Meeting with representative SAKGF with Hort representative on 28th March 2018. Email follow-up on 1st May 2018 offering materials to share with their communities.

• Meeting with Stephanie Alexander on 27th June 2018 to provide more information about project goals and potential for collaboration in the future.

The Good Foundation - Jamie's Learn Your Fruit & Veg (LYFV)

About: 'The Australian school program is fun, educational, and designed to teach children about food - what it is, where it comes from, and how it affects their bodies.'

http://www.jamieoliverslyfv.com.au/

• Meeting with creative director of The Good Foundation on 4th June 2018. Discussed potential partnership or opportunities for collaboration with LYFV.

Testimonials

29th May 2018

Phenomenom has been truly phenomenal!

This refreshing and engaging resource has provided the hook I've needed to capture the imagination of my Year 4 students and act as a springboard to deep learning across many areas of the curriculum.

Each element of the resource is equally as essential. The digital component has been a highlight for students with many episodes being replayed at their request. I have been able to use them across a number of different subject areas ranging from History to Science back to Health and then straight into Sustainability. The curriculum support is a treasure trove for teachers who are time poor but always seeking ways to do things better and more creatively. They have been both inspiring and time saving. The Carrot Dude episode inspired lessons on the history of vegetables, the arrival of the First Fleet, and the importance of feedback and showing grit. Aunty Di and the Welcome to Country episode helped us to understand this beautiful ancient tradition and led to us explore seasonal calendars and compare and contrast these with our own seasons. So many great ideas; so many opportunities to integrate these resources across the entire curriculum.

I have loved using Phenomenom in my classroom and am excited to see how future episodes act as a stimulus for both teaching and learning.

Miss Cassandra King Year 4 Classroom Teacher St Kilda Primary School (SKPS)

27th June 2018

Hi Bev,

I just wanted to say thanks for sharing the resources about 'How to Make Kangaroo Poo Glue'. Our grade 5/6 class watched it prior to our whole-school excursion to the Heathcote-Graytown National Park last week and the teaching staff referred to it during the day. Many of the children were examining the different animal droppings and looking for pathways, discussing reasons why it would be important to understand animal movement patterns, etc. They also looked closely at the amazing number of grass trees there, discussing growth rates, uses for the plant, and many other related topics. We had an amazing day in the bush and I was really happy to see one little boy who is particularly fond of his electronic devices, climbing trees and sketching nature. The excursion was great for young and old (open to helpers, parents, grandparents), with so many great learning opportunities seized by our wonderful team of educators throughout the day. So thanks again – the Phenomenon resources were fun and educational, and highly relevant to our work around sustainability.

Kind regards,

Parent – St Joseph's School Nagambie

Outcomes

By creating a resource that is aligned with current and forward-looking trends in education, easy to administer and freely available to every teacher, parent and child in Australia, this project empowers the vegetable industry with the opportunity to encourage attitudinal shifts from a young age to a wide audience, over a sustained period, with positive messages about vegetables delivered by the children themselves.

Media coverage in the months following release of the episodes and resources has exposed teachers, parents and caregivers of school-aged children to the program and resulted in the following outcomes:

- An increased understanding of the barriers to vegetable consumption and perception about vegetables among school-aged children and their parents.
- An increased perception of the importance of vegetables and the benefits of consumption.
- Opportunity for change of attitudes

As school-aged children are exposed to the webisodes and resources over the coming months and years, it is likely that they will:

- Be exposed to vegetables in the classroom more often.
- Learn about the functional benefits of vegetables to their wellbeing.
- Be exposed to positive role-modelling towards vegetables by experts and children their own age.
- Be empowered to form their own opinion on vegetables for their wellbeing.
- Deliver positive messages about vegetables themselves.

For vegetable growers and Hort Innovation stakeholders, this is an opportunity for:

- Increased industry understanding of the triggers and barriers to vegetable consumption.
- Improved industry understanding of, and effective engagement with, Australian consumers.
- Highlighted alternative channels to engage with the consumer. The classroom especially, is an excellent environment for children to engage with vegetables in a positive way.
- Further integration of vegetables into Australian classrooms and a fostered link to vegetable consumption at home.

Monitoring and evaluation

Throughout this project, monitoring and evaluation was conducted by an assigned representative from Hort Innovation and independent PRG.

This included regular communication via email, phone-calls and face-to-face meetings, as well as three milestone reports, delivered electronically to the Milestones team.

Due to the nature of the project being a pilot, the standard Hort Innovation evaluation measures were not fully applicable. To evaluate the impact of the project, it was agreed that monitoring and evaluation work would be undertaken at a later time, once it has had sufficient time in the market to influence educators, children, parents and caregivers.

Recommendations

These recommendations are based around the outputs and key findings over parts 1, 2 and 3 of VG16018.

The potential long-term outcomes of this project are ultimately dependent on teachers of years 3-6 utilising the resources in the classroom and encouraging their students to explore them at home with their parents, siblings and peers, in order to help boost attitudes, behavior and ultimately, consumption of vegetables.

At the conclusion of this project, EAP has recommendations on how the Australian vegetable industry can leverage the outputs produced to further achieve the intended outcomes:

- 1) **Distribution:** Further efforts can be made to build awareness among the target audiences, especially teachers, on the merits of the Phenomenom program to their teaching practise.
- 2) Additional resources: The existing brand, assets and distribution platform can be added to, or adapted. Topics and creative devices can be further explored, as well as showcasing different vegetable growing regions in Australia, providing an additional channel to connect growers with consumers.
- 3) **New delivery formats:** There is an opportunity to extend to other delivery methods that CBR identified in the research phase of this project, including gamification, interactivity, competitions and live events to further engage with the target audiences.
- 4) **Different age groups:** Younger and older year levels can be targeted. The topics, language and creative execution would need to be adapted accordingly.
- 5) **Deep-dive resources:** Some of the footage captured and many of the existing PDF teaching resources can be added to or re-worked in order to provide more in-depth learning experiences.
- 6) **Licensing:** Hort Innovation to license the Phenomenom brand to EAP to further develop assets and distribution. Complementary sources of funding (e.g. primary industries, education, health and nutrition) should be explored to facilitate this development.

Future digital food education programs funded by the vegetable industry can use key insights from CBR, gathered during the research phase, including:

- Material should be produced to a high standard in both content and appearance.
- The use of a simple message.
- The presence of children their own age leading the conversation.
- The material needs to be freely available across multiple platforms at home and in the classroom.
- The provision of lesson plans and activities that don't require specialized equipment or infrastructure to ensure scalability and accessibility.

At an overall level, EAP has highlighted key insights and recommendations regarding future work in the vegetable education space:

- 1) Educational opportunities: The integration of vegetables into existing lessons in subject areas including Science and Technology, English, the Arts, Health and PE, Maths and Humanities is a future direction for food education initiatives, as curriculum in Australian primary schools is further squeezed of opportunities for dedicated lessons on food.
- 2) Parents: In part 1 of the project, CBR identified that parents are the gatekeepers to child vegetable consumption. This project, while identifying parents of children aged 8-12 years as a target audience, did not produce materials specifically aimed at parents. There is an opportunity to develop materials for parents and care-givers that educates and challenges them to reflect on their own attitudes and behaviours towards vegetables and how this impacts their children's attitudes. The executional considerations of such a resource for parents and care-givers, although very different to Phenomenom, could be developed to reference the existing program materials to ensure consistency of messaging, amplify distribution and eliminate confusion.

3) **Partnerships:** Partnering with government and industry to better target distribution and enhance audience exposure to the materials would facilitate uptake. Having provided the seed funding for this new approach to food education, the vegetable industry can involve cross-industry organisations and corporations to help develop further materials. Importantly, any partnerships formed could explore the potential for more targeted distribution activities of the outputs produced as a result of this project.

Refereed scientific publications

None to report

References

Australian Bureau of Statistics National Health Survey 2014-2015, http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001?OpenDocument

VG12078: Project Harvest. (2013-2017). Colmar Brunton Pty Ltd.

VG12034: Veggycation. (2018). Hort Innovation.

VG13090: A Strategy to Address Consumption of Vegetables in Children. (2015). CSIRO.

VG15005: Implementation Plan For Increasing Children's Vegetable Intake. (2016). CSIRO.

Intellectual property, commercialisation and confidentiality

Hort Innovation Intellectual Property Register completed. The IP register is confidential, due to the details of agreements with child actors involved in the production of webisodes. Refer to Appendix 17.

Acknowledgements

Guests

EAP would like to thank the guests who donated their time to appear on the webisodes, they are:

Anne Langdon; Ariel Epstein; Arkady Zaslavsky; Aunty Dale Tilbrook; Aunty Di Kerr; Brad McBride; Chris Judd; Dianne McGrath; Eugeni Roura; George Calombaris; Karsten Poll; Kylie Andrew; Miriam Raleigh; Morgan Mitchell; Paul Harrison; Paul West; Phil Ferguson; Sam West; Sophie O'Neil.

Locations

 $Special\ thanks\ to\ Press\ Club\ Projects,\ Melbourne,\ for\ donating\ the\ classroom\ space\ that\ featured\ in\ the\ webisodes.$

Thanks to the following locations that were featured in the webisodes:

Adina Apartments Flinders Street; Castlemaine Primary School, Castlemaine; Collingwood Children's Farm; IGA East Melbourne; Melbourne Sports Hub (Lakeside Stadium), Albert Park; Torello Farm, Dromana; Victorian Institute of Sport, Albert Park; Winter's Flat Primary School, Castlemaine.