A SNAPSHOT FROM A RURAL AREA OF AUSTRALIA: WHY AND HOW EARLY CHILDHOOD EDUCATORS AND CARERS TAKE ON BOARD SUSTAINABLE PRACTICES

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Abstract: A report card on the wellbeing of young Australians does not paint a promising picture (ARACY, 2013). Some of the poor performance indicators from this report can be linked to early childhood education and sustainability, which forms the basis of this paper. A survey of recently graduated Certificate III and Diploma students will provide a snapshot of their feelings on sustainability. This will provide a point of view from a new generation of early childhood educators and carers in one rural area of Australia. The survey questions how these educators rate the need for sustainable practices and why. Will these educators follow their services program, or do they genuinely feel they have a role in the big picture of ensuring young people gain knowledge about sustainable practices? The second part of this paper will give an overview of a case study of sustainable practices being undertaken in a rural preschool that caters to Aboriginal and low income families. These practices will be linked to the 2009 Early Years Learning Framework that has the philosophy of children being, belonging, and becoming (DEEWR, 2009). The case study will demonstrate how sustainable practices can be linked to the wellbeing of children as well as providing them with hands-on learning opportunities and knowledge. This is done in the hope that these educational practices will contribute to the children's sense of well-being and thus contribute to their resilience in our volatile, uncertain, complex, and ambiguous world.

Key words: early childhood education, preparation of educators/carers, rural education, sustainability

Introduction

Australian Research Alliance for Children and Youth [ARACY]'s (2013) report card on the wellbeing of young Australians does not paint a promising picture. In an international context of Organisation of Economic Co-operation and Development (OECD) countries. Australia has been best described as "middle of the road" (ARACY, 2013, p. 1). Nineteen headline indicators for children's development, and wellbeing have been developed to rate a country's performance. ARACY (2013) states that "Australia is ranked in the bottom third of OECD countries for around one-quarter of the indicators" (p. 4).

In Australia there is a notable gap in wellbeing between Indigenous and non-Indigenous people. An Indigenous person has a life expectancy of 10 to 17 years less than non-Indigenous people, and Aboriginal babies have twice the mortality rate of other Australians (Oxfam, 2009). It is Aboriginal infant mortality that contributes to Australia's position in the bottom third of OECD countries.

When assessing the big picture, Australia is not performing that well when it comes to children's wellbeing. Some of the poor performance indicators from Report Card: The Wellbeing of Young Australians can be linked to Aboriginals, early childhood education, and sustainability (ARACY, 2013). Issues from my local area that are related to these areas of the report are (a) the general values of the community, (b) the training requirements of early childhood educators, and (c) Australia's new National Ouality Framework. These the underlying issues that will form the first part of this paper. The second part of the paper is a short case study of a rural preschool that is working toward addressing areas of wellbeing for children attending that service.

Australia's New National Quality Framework and Sustainability

As of 2014 all educators working in the early childhood profession in Australia must have a minimum training of a Certificate III in children's services. Several subjects within the certificate address the need for sustainability. The students must study the new Early Years Learning Framework (EYLF) and the National Quality Standard (NOS) as required knowledge, and these also discuss the need for sustainable practices. Therefore, every new early childhood educator working in this profession should have a basic knowledge of the standards and the elements that include sustainability.

Australia's new National Quality Standard specifically discusses the need for early childhood educators to ensure sustainability is part of the program and management of their services. The standard is made up of seven quality areas that address the national regulations for early education and care services. The third area addresses the physical environment and is made up of several elements. Elements 3.3.1 and 3.3.2 specifically address sustainability:

Element 3.3.1 – Sustainable practices are embedded in service operations. Element 3.3.2 – Children are supported to become environmentally responsible and show respect for the environment' (Australian Children's Education & Care Quality Authority [ACECQA], 2011).

The quality standards are a guide and should be part of the basis of every good early childhood educator's planning, thus we can see that sustainability should be included in children's learning in education and care services.

The Community, Early Childhood Educators, and Sustainability

Before discussing the feelings of early childhood educators who have recently undergone training to work in the early childhood profession, an example of the community will give insight into the region. The northern rivers area of New South Wales in Australia is where sustainability is often considered an important issue to the community. At present there is a movement to stop coal seam gas mining and fracking in the area. People are genuinely concerned about keeping the good quality of our water. A survey from residents in our local government area found that 86.9% of people did not want this type of mining in the area, even with the promise of more jobs (Luke & Lloyd, 2013).

Other example of the community's commitment to sustainability includes the uptake of installing solar power systems on private homes. In NSW 8.5% of houses have installed a solar power system while in the northern rivers area, 18% have installed these systems (Page, 2014). When it comes to recycling the local councils provide a pick up service for some recyclable items. One of the local councils proudly stated that they were the first council in Australia to achieve an organic certification for their compost made from kerbside food and garden waste collection (Lismore Council, 2014). These are a few examples of the community where the small group early childhood educators live and where the data were collected.

A short survey of a group of students, who recently completed their first steps in training to be early childhood educators, was conducted. The survey included eight Certificate III (one year course including 80 hours work placement), and 12 Diploma in children's services (two year course

including 120 hours work placement) students. Sustainability issues were embedded in classes within the Certificate III and Diploma coursework. Of the 20 surveys given to students, half were returned. The students were asked 5 questions and given room to make final

comments. They were asked to rate their answers to the question on a scale of 1 to 5, with 1 being unimportant and 5 being extremely important. Table 1 lists the questions asked, and the average response given.

Table 1
Questions and a Sample of Comments from Sustainability Survey

Questions	Average Response	Some Comments
1. As an educator and carer in today's uncertain and complex world, how do you rate the issue of sustainability in the early childhood profession?	4	Researcher comment: Most people responded with a 5, two people responded with a 1 and 2.
2. Why		Quotes from students included: "To teach children good sustainable habits", "to care for the world's resource", "children need to learn about and care for their world".
3. How would you rate the importance of climate change in your life?	3.5	
4. How would you rate the importance of climate change in the early childhood education profession?	3.5	
5. How would you rate your role in helping children to understand the need for sustainability?	4.5	
6. Any further comments		Quotes from students included: "We are role models", "We need to help children and families understand the importance of sustainability".

Klein (2014) explained how many people are engaged in climate change denial or find it too hard and complicated to deal with so they forget about it. The questionnaire asked students how they rate importance of climate change. These new early childhood educators had rated climate change as an above average concern, and most considered their role of teaching sustainability to be most important. Maybe as Klein (2014) suggested, climate change is too complicated to deal with, but these indicated promoting students that sustainability is a responsible, ethical part of their work with children. This is an area that requires further research. Two of the educators involved in the survey were active participants in the following case study.

Case Study about an Early Childhood Preschool and Sustainability Learning

I believe that giving children an opportunity to learn about sustainability is not only an important part of early childhood education, it also offers many opportunities for learning in all developmental areas and it is our responsibility as global citizens. This case study is from a small rural preschool, where I job share the position of director and teacher. I am a member of a team of educators who ensure sustainability is an everyday part of our program. We are a small rural preschool who cater to the local Aboriginal community, farming, and alternative life style families. We have several projects going that assist children to learn about sustainability, and this paper will discuss two.

The first project was our chooks. After converting our greenhouse into a chook yard, we were given four hens and a rooster. The first part of this project was to teach the children how to care for the chooks. At first many of the children were tempted to chase or throw stones at the chooks. Discussions with the children lead to the drawing up of 'chook rules'. The children came up with the rules with the assistance of the educators. They were written up on a poster with pictures that some children chose to contribute. As the children were the authors of the rules, they also became the enforcers, so that if a child was chasing or hurting the chooks in anyway, the other children would remind them of the rules. The rules also included the feeding, watering, collecting of the eggs. Although the children cannot read, they do refer to the written word and pictures on the 'chook rules' poster.





Pictures 1 and 2. The chooks share the playground with the children; and a hen lays an egg in a child's bag storage area.

The children collected their food scraps throughout the day to be fed to the chooks. When the lawns were mowed they raked up

grass cuttings to put into the chook house. We found a group of boys who had challenging behavioural problems became dependable members of our group when given responsibilities in caring for the chooks. This same group of boys, who in the past had shown no interest in preliteracy and pre-numeracy skills, became very interested in literacy and numeracy that related to our chooks.





Pictures 3 and 4*. A child collects grass cuttings for the chook house; and children put the collected grass cuttings into the chook house. (When the grass has mulched down by the chooks it is removed and added to the vegetable garden.)

An example of a numeracy skill was when eggs were collected and added to the carton, there was a need to count all the eggs in the container with comments on how many had been added. When one of the hens sat on some eggs, all the children were involved in counting down the days until the chickens were due to hatch. A poster was created and put up in the classroom. It was referred to as a whole group as well as small groups and individuals checking how many days were left until the chickens hatched.

A positive learning environment gives children the best opportunity to learn and grow. When the environment is safe and where the child feels like they belong, then an atmosphere is created that fosters mathematical and literacy learning (Department of Education Employment and Workplace Relations [DEEWR], 2009; Rey et al., 2012). If learning is offered in a way that is meaningful and connected to the child's life, such as growing and cooking food, then this will improve the student's

ability to retain skills (Rey et al.). Cooking the produce that children have cultivated is a fun and meaningful way to bring literacy and numeracy learning into the classroom. Not only do these activities promote literacy and numeracy, but they also encourage children to learn about growing and preparing healthy food, thus contributing to their developing resilience and well-being. To share this information with parents, learning stories are recorded for each child's personal portfolio.

The second project was to extend our garden using recycled plastic milk and soft drink bottles. The children and educators collected and washed the plastic containers. The containers were cut so that potting mix could be added, then attached to the fence with cable ties. The children then planted strawberry plants and watered them in. This hanging garden was at the children's level so they could watch and care for the plants. As the children helped to set up this hanging garden they became aware of another use for empty plastic bottles. Again this project became an experience where the children had opportunities to practice skills in most of their developmental areas.



Picture 5*. Children water the seeds they have just planted in the hanging garden.

This also reflects the EYLF Outcome 2, where children are connected with and contribute to their world (DEEWR, 2010) as they were willing participants in a sustainability project. This project reached further into the community through newsletters and parents visiting the service, as they were given the opportunity to view a productive way to recycle plastic bottles.

Feedback from families indicated that they liked this idea and would try it at home.

Wellbeing and Belonging

The Australian EYLF among other prospects has been written to provide an opportunity for educators to work towards 'a clear focus on children's learning and wellbeing' (DEEWR 2010). framework also states "fundamental to the Framework is a view of children's lives as characterised by belonging, being and (DEEWR, 2009, p. becoming" Belonging is about when educators and children feel the sense of connection to the group. That is, that they have a relationship and place within it. With that belonging, each child is in a safe place to work toward becoming themselves in their society, but can also have time to being themselves: a child with all life's joys and complexities. When the children and the educators belong, they may feel ownership of their environment, and then learning in its many forms, can become a natural part of their day in the early childhood service (DEEWR, 2009, p. 7).

An essential part of pedagogy practices highlighted in the EYLF is documentation of children's education and sharing this information with the child's family (DEEWR, 2009). Appendix 1 is an example of one form of documentation undertaken at our service. It shows a 'learning story' that uses the EYLF learning outcomes and key components. Each child has input as to what he or she keeps in the portfolio as well as educator's recording learning stories to add to them. The recording of learning stories is printed and glued into each child's portfolio with other artwork the child has chosen to add. The learning story shares information with families about the different types of learning that happen in the early childhood environment and how it relates to the five learning outcomes. While most of the outcomes generally relate to children's education, areas in the learning story show the key components of EYLF. The children often revisit this type of documentation as they share their portfolio with friends and family.

Conclusion

According to ARACY's (2013) report of Australian children's wellbeing, we are in an average position, but I believe the new Australian framework has created a space for improvements to be made in the early childhood educator and care sector. The two projects that have taken place at our service had been planned using the EYLF and the NQS as a guide. They were undertaken with the children, who were involved in all aspects from planning, implementation, caring and maintaining the

projects, and also enjoying the benefits. The educators have ensured that every child has a sense of belonging, and these two projects were part of that process. The benefits to children have been observed in all developmental and wellbeing areas. We have had less behaviour problems and a greater interest in literacy and numeracy when linked to the projects. The educators at our service believe that we are contributing to these children's learning and wellbeing, thus contributing to their resilience in our volatile, uncertain, complex, and ambiguous world.

*The author has parental permission to publish the photos of the children.

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Appendix A

Learning Stories



18/7/13

R., D., and A.: this was their first day back after school holidays. As soon as the boys got off the bus they noticed how big the snow peas had grown. They immediately started to pick the peas to eat. The boys spent twenty minutes discussing how big the peas had grown and searching for more to eat. They also called out to the other children to let them know there were lots of snow peas.

Interpretation:

The boys understand and use language to discuss the mathematical concept of size (plants and which snow peas are the correct size and are ready to eat). They understand where to find the snow peas ready to eat.

They enjoy sharing information with each other and other children (language and social skills).

Where to from here:

Children to create hanging garden on fence from empty plastic milk and soft drink bottles. They may plant strawberries and herbs for the summer.

Learning Outcomes and Key Components

- 1. Children have a strong sense of identity.
- --Children feel safe, secure and supported.
- --Children develop their emerging autonomy, interdependence, resilience and sense of agency.
- --Children develop knowledgeable and confident selfidentities
- *Children learn to interact in relation to others with care, empathy and respect.

2. Children are connected with and contribute to their world.

- --Children develop a sense of belonging to groups and communities and an understanding of the reciprocal rights and responsibilities necessary for active community participation.
- --Children respond to diversity with respect.
- --Children become aware of fairness.
- --Children become socially responsible and show respect for the environment.

3. Children have a strong sense of wellbeing.

- --Children become strong in their social and emotional wellbeing.
- --Children take increasing responsibility for their own health and physical wellbeing.

4. Children are confidant and involved learners.

- --Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity.
- --Children develop a range of skills and processes such as problem solving, enquiry, experimentation, hypothesising, researching, and investigating.
- --Children transfer and adapt what they have learned from one context to another
- --Children resource their own learning through connecting with people, place, technologies, and natural and processed materials.

Author

Karren Amadio has a Master of Education with Honours in Early Childhood Education and Care. She has over thirty years teaching experience in a preschool. Since 2004 she has worked for a Registered Training Organization to teach courses for Certificate III and Diploma of Children's Services. She also does contract teaching for the University of New England.