LOOSE PARTS

EYPD401: Early Years Project
Georgia Cleanthous
4798545

Acknowledgments

All challenging work needs self-efforts as well as the guidance and inspiration of others, especially those close to my heart.

To Jane, you are a true inspiration, thank you for supporting me through this chapter of my life.

To Carly and Nicola, for continuously inspiring me and empowering me professionally and personally.

Table of Contents

INTRODUCTION

Chapter 1: Introduction

1.1 Background

Loose parts are open-ended materials that can be manipulated, arranged, redesigned, taken apart and put back together by children (Sear, 2016, Penfold, 2016). They can vary in size, be natural or built, found or recycled. Loose parts can be anything that doesn't have an intent or purpose (Sear, 2016, Penfold, 2016 and An Everyday Story, 2013). It supports experimenting, hypothesising, construction and inventiveness (Daly & Beloglovsky, 2015 and Kochanowski & Carr, 2014). The purpose of implementing these types of resources into the early childhood setting is to promote children's creativity, imagination, problem solving skills, concentration, social collaboration and independence among other things (Kiewra & Veselack, 2016). It allows children to become active participants in their learning and process information in a way that is right for them (Kiewra & Veselack, 2016 and Sear, 2016). Examples of loose parts are; wood cut offs, pallets, tyres, PVC pipe, fabric, stones, shells, pinecones, sand, dirt, water, leaves, milk crates, jars, rope hoops etc. (An Everyday Story, 2013). 'Loose Parts' will be used throughout this research project to refer to these types of resources.

The Loose Parts theory was developed by Simon Nicholson, who believed that the incorporation of loose parts in natural environments empowered creativity and inventiveness (Nicholson, 1972). Although the loose parts theory was developed in the 1970s, it has only recently begun to gain momentum. Most of the research on loose parts take place in Scandinavian countries, however recently further research in Australia has been conducted showing children are becoming more active, social, resilient, creative and responsible risk-takers when engaging with loose parts in their school environments (Bundy et al., 2009 and Garvis & Pendergast, 2017). Loose parts theory emphasis the idea that children will develop and learn with the interaction of loose parts in natural environments (Fjortoft. I. & Sageie, 2000 and Nicholson, 1971). Optimistically, this awareness will become widespread in Australian early childhood education and care services. There are pressures on children to begin reading and writing from such a young age while learning vast amounts information in the recent years (Bundy, 2009 and Etchingham, 2011). Even

back in the 1960s an article was published on the pressures of children to learn extensive amounts of information from such a young age (Liddle, 1965). As times continue to change and evolve other aspect arise, such as technology and the lack of physical activity children have had in the recent year because of it (Atchley, et al., 2012 and Fjortoft, 2001). There is more testing in schools than ever, there is a decrease in children playing outdoors, even when they do it is restricted and due to parents' increased work hours there is a higher demand for early childhood education and care services (Bundy, 2009; Atchley et al. 2012; and Etchingham, 2011). This is possibly why there is a growing motion for loose parts play. In early childhood education and care loose parts play affords for holistic child development such as social and emotional development, independence, resilience and persistence, all of which are required when starting school (Dockett & Perry, 2006). The implementation of loose parts will promote children's right to a childhood and to play (UNICEF, 2017), while spreading awareness on the benefits of free open-ended play with loose parts that will address the modern-day matters.

1.2 Where did the idea come from?

The idea of loose parts has come from my previous experience and passion for it. During university breaks I return home to Darwin to work at NT Explorers an Early Childhood Education and Care centre. My co-workers, Carly and Nicola, started to implement loose parts and documented the significant difference it had on children. This then grew to reflecting and continuing to expand on loose parts within their 4-5-year-old room and through the whole centre. The loose parts theory resonated with me because it linked in with my image of the child and how I grew up. I grew up on a block of land that afforded for lots of imaginative play with open-ended materials. When bringing this idea to my mentor Mel, she stated she had been considering implementing loose parts herself, thus there was immediate agreement.

1.3 Significance of Research

Although there is research that supports loose parts and identifies the endless benefits, there is a lack in understanding of the implementation process. The role of the educator when implementing loose parts has been identified in recent research (Penfold, 2016, Veselack, Cain-Chang & Miller, 2013, Olsen & Smith, 2017 and Keiwra & Veselack, 2016), however this current research project will examine how to support educators to take on the roles and implement quality loose parts practice. This research project will add to the growing momentum and awareness of the loose parts theory.

1.4 Purpose of Research

The purpose was to determine educators' knowledge, perceptions and understanding of loose parts theory and examine children's current play and environment. With this information, strategies to support educators will be determined with the referral to Carly and Nicola, loose parts enthusiasts. The aim is to support educators with the successful implementation of loose parts into the early childhood education and care environments.

1.5 Research Questions

The following questions will guide the study;

- How can an early childhood education and care service successfully implement loose parts?

The *successful* implementation of loose parts can be defined as; a wide range of loose parts that are accessible to children in long uninterrupted play periods where children have a sense of control, independence and empowerment (). They also use loose parts meaningfully rather than breaking the resources or hurting one another. Educators' understand the loose parts theory, their role and why they are doing it.

To obtain further detail into how to successfully implement loose parts, the following sub questions will be used to guide the data collection methods;

- How do resources impact children's play within a service?

- What are educators' views on an open-ended curriculum that incorporates 'loose parts'?

- How can educators be supported to incorporate loose parts into a more open ended curriculum?

1.6 Situational Analysis

Wollongong City Community Preschool (WCCP) is part of a not-for-profit, community-owned company that has over 40 services in the Illawarra, NSW. As it is a part of a larger organisation, this gives my project the potential to spread to the other services. This project topic is also relevant to all services, as it is based on low cost, community connections and not reliant on spoken language or physically ability. At WCCP there is diversity in culture, socioeconomic background and additional needs amongst the children, this I believe only strengthens my project rather than restricts it. The preschool is located in Wollongong central and backs onto the local park, which has the potential for sourcing loose parts, excursions and utilisation of the open space.

The outdoor space consists of a sandpit, mud kitchen, deck and a wide-open area that generally contains climbing equipment. There are currently minimal loose parts available at the service indoors and outdoors. At WCCP, they support children's learning and development through a hands-on, play based curriculum approach.

LITERATURE REVIEW

Chapter 2: Literature Review

2.1 Loose Parts

In early childhood education, there is a recent movement that has been on the rise since the 1970s, only starting to gain momentum. This trend is more commonly known as loose parts. The theory of loose parts originated from an architect, Simon Nicholson in 1972. His vison articulated that children's creative empowerment came from the exposure to open-ended materials and the natural environment (Penfold, 2016).

Loose parts are open-ended materials that can be manipulated, arranged, tinkered with, changed, balanced or redesigned by children. They can vary in size, be natural or built, found or recycled. Loose parts can be anything that doesn't have an intent or purpose (Sear, 2016, Penfold, 2016 and An Everyday Story, 2013). Loose parts act as tools for practical play, building materials or props for constructive and dramatic (Kochanowski & Carr, 2014). They can vary in size, be natural or built, found or recycled. The best loose parts are simple and allow children to play in a variety of ways on many different levels encouraging experimentation, construction and inventiveness (Kochanowski & Carr, 2014). The purpose of implementing these types of resources into the early childhood setting is to promote children's creativity and inventiveness among other things.

Daly & Beloglovsky (2015) stated; "When children interact with loose parts, they enter a world of 'what if' that promotes the type of thinking that leads to problem solving and theoretical reasoning. Loose parts enhance children's ability to think imaginatively and see solutions, and they bring a sense of adventure and excitement to children's play" (Daly & Beloglovsky, 2015, p. x). The use of loose parts allows children to become active participants in their learning and process information in a way that is right for them (Kiewra & Veselack, 2016 and Sear, 2016). The following themes are reoccurring throughout literature; the evolution of loose parts, the environment, educator response and the developmental benefits.

2.2 Loose Parts Theory

Back in the 1970s, Simon challenged societies view that the creation of art and construction of an environment was complicated and difficult thus could only be done by the gifted few (Nicholson, 1972). This view has overlapped into early childhood, despite the evidence that supports children enjoy experimenting creating and discovering things with materials (Penfold, 2016). Nicholson (1972) believed that providing children with flexible open-ended materials supported their creativity and with more variation and amount of materials the more in depth exploration occurred (Nicholson, 1971). Nicholson (1972), uses the question "which (art) exhibits are you more drawn to: the paintings on blank walls or the interactive pieces?" (Nicholson, 1972), to engage educators in reflecting loose parts. He continues to say that the interactive ones that physically engaging and invite viewers to experiment are the exhibits that get the attention (Nicholson, 1972). This demonstrates the human nature to actively explore the world and how it works.

Nicholson's theory shares a similar philosophy to Malaguzzi's 'image of a child' (Penfold, 2016 and An Everyday Story 2013), in that children are seen as capable, competent and creative beings that are active decision makers in their play, ideas and environments (Nicholson, 1972 and Penfold, 2016). The loose parts theory also links with Malaguzzi's 'Hundred Languages of a Child' (Penfold, 2016), which understands that children express themselves through a hundred different ways that must be valued and encouraged (Penfold, 2016). This is demonstrated in loose parts play where children are encouraged to express themselves through exploration (Nicholson, 1972).

Although the theory evolved from Nicholson discussing loose parts in regards to construction of playgrounds, it has evolved over time and being applied to the construction of artworks and the environmental layouts (Penfold, 2016). Proposing that the inclusion of loose parts in a natural setting will encourage inventiveness, creativity, dynamic opportunity and at times risks (Little & Wyver, 2008 Penfold 2016).

2.3 The Environment

"In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (Nicholson, 1971). Within the theory of loose parts the environment has evidently the biggest influence on children. The environment is seen as the 'third teacher', informed by the Reggio Emilia approach, which provides a space for children to produce complex relationships that enable social, emotional and cognitive development (ACECQA, 2016 and Kochanowski & Carr, 2014). Luchs and Fikus (2013), did a study that found natural outdoor environments to promote longer play episodes than the modern playgrounds. Children in the natural outdoor environment had approximately three play episodes within 30 minutes, while children at the modern playground had six (Luchs & Fikus, 2013). This difference in play episodes demonstrates the engagement, concentration and inquiry that occurred in the natural environment. The natural complexity of the environment supports children's need of sensory stimulation and promotes their continual learning (Kochanowski & Carr, 2014, Fjortoft & Sageie, 2000 and Fjortoft, 2001). Kiewra and Veselack (2016) revealed that the predictability of the space, the amount of time given to children to play and the types of open-ended materials available all contributed to the development of children's creativity and imagination (Kiewra & Veselack, 2016). When engaging with an environment children should be able to access materials they wish to use and have the space to play without restriction (Kiewra & Veselack, 2016, Curtis & Carter, 2003 and Kochanowski & Carr, 2014). This makes it possible to problem-solve with greater independence. Having a wide selection of loose parts affords for children to be in complete charge of their play and have limitless opportunities guided by their unique imagination (Kiewra & Veselack, 2016, Pendfold and Nicholson, 1972). Something as simple as a stick can be used as a sword then a wand, changing to meet their play needs and following the play schemes seamlessly (Kochanowski & Carr, 2014). While being in natural outdoor environments that are not maintained, children are given a sense of being in a purely wild space and this promotes more complex and creative play episodes (Kochanowski & Carr, 2014). The loose parts theory challenges educators to provide open-ended resources that stir away from children ending up with the same result or following similar instructions (McLennan, 2010). With open-ended materials children's imagination and inventiveness is cherished rather than demolished.

2.4 The Role of the Educator

Educators have an important role to play with loose parts, it is not about presenting children with a large amount of loose parts in an area and letting them 'go wild', what educators put in place is central to the successful learning experience (Penfold, 2016). Literature has suggested that educators must challenge children's thinking with thought-provoking questions, trust children's decisions and be responsive to their ideas, thinking strategies and discoveries (Penfold, 2016, Veselack, Cain-Chang & Miller, 2013, Olsen & Smith, 2017 and Keiwra & Veselack, 2016). Although loose parts engage children in beneficial learning and discovery, it is essential for educators to be an engaged in observing and documenting the learning, interests and thinking that occurs (Bohling, Saarela & Miller, 2010, Waters & Maynard, 2010 and Keiwra & Veselack, 2016). Educators mind-set on children's creativity can often dimension it before is even develops. Providing the answers, ideas and solutions to children can interrupt their creative thinking and reinforce children to never think for themselves (Keiwra & Veselack, 2016). When implementing the philosophy of loose parts, it is crucial to have the flexibility and consistent time periods that cater to the needs and desire of children. During child-directed, open-ended play educators should allow long time periods for children to have deep investigation, use the trial and error method and have time to express, evaluate, hypothesis, and learn (Kiewra & Veselack, 2016 and Olsen & Smith, 2017). Children need time to work until they are done, the space and independence to move while they work (Kiewra & Veselack, 2016). Children have the right to free play (International Play Association, 2012) and it is the responsibility of educators to employ this by providing minimal intervention over long time periods, access to quality resources, ample amount of space and the freedom to play (Kochanowski & Carr, 2014).

2.5 Benefits of Loose Parts

Flexible thinking and creativity are crucial skills for children to obtain to be productive members of society in adulthood. Research has demonstrated that children are empowered to practice problem solving, self-regulation, concentration and decision making when environments include loose parts (Kochanowski & Carr, 2014 and Sear, 2016). Children who engage in free loose parts play will gain independence, self-determination, as well as skills in risk taking, team work and experimentation (Kochanowski & Carr, 2014, Daly & Beloglovsky, 2015 and Bohling, Saarela, &

Miller, 2010). Children will always seek out risk and the natural outdoor environment will stimulate their desire for that (Cevher-Kalburan, 2015). This is how they learn about their world and themselves in it. Children will explore their bodies capabilities, manage risk and master their skills, all in which educators should encourage (Cevher-Kalburan, 2015 and Heppel, 2013). When educators promote and respect children's risk taking play they help to develop their autonomy, independence and agency (Gill, 2010).

Loose parts promote social development and interaction amongst peers, it provides children with the opportunity to develop problem-solving skills and persistence. Despite the age range of children, collaboration and exploration can occur effortlessly amongst children as natural materials are readily available making it easy for peers of varying abilities to interact with one another in the same environment (Kochanowski & Carr, 2014 and Neill, 2013). The size and shapes of loose parts rely on social interaction between children to negotiate, persist and problem solve how to move and manipulate objects while inspiring creative and dramatic play schemes (Kochanowski & Carr, 2014). When children are creating something together the process is valued more than the final product, this is often because children will interact while working creating social connections (Mclennan, 2010 and Drew & Rankin, 2004). Not only does this support language development, but it also supports children to learn to appreciate their own ideas and those off others around them (Drew & Rankin, 2004). The benefits of loose parts theory are that it focuses on the thinking behind the invention, the development of the creative ideas and the social interactions. This offers children authentic and holistic approaches of investigation and learning, which will in turn help them develop skills necessary for a successful unknown future (McLennan, 2010).

The use of open ended resources can create a rich learning environment that promotes self-determination in children with additional needs (Wall & Dattilo, 1995). In some cases, children with additional needs are provided with limited opportunity to make decisions and are exposed to controlled situations (Wall & Dattilo, 1995). These settings prevent them from developing a sense of self-determination (Wall & Dattilo, 1995). Therefore, environments that promote freedom of choice, competence, a sense of control and expression of preference will foster the development of self-determination in children of all abilities (Wall & Dattilo, 1995).

2.6 Conclusion

The theory of loose parts has developed over the past decades and have recently become of popular trend in early childhood in recent years. It is a theory that promotes early childhood professionals to reflect and evolve past the 'modern' ideas of playgrounds, artworks and play resources. The large open-ended environment with natural vegetation has been proven to support children's creative, imaginative and constructive play, discoveries and ideas. All while evidence demonstrations the use of open-ended loose parts to also have positive effects on children's depth of play. These studies alone promote further investigation into different ages, effects on behaviour and children with additional needs.

Providing the ample amounts of space and materials to children in only half the theory of loose parts, supporting educators must be present. Their role is to observe from a distance while being open to engage and provide thought provoking questions. Throughout this review, it is evident that the loose parts theory and use of natural environments and materials have positive effects of children's development. Going back to basics in coming years will only bring the future generations forward with their innovative ideas. Research has a dominant presence of *outdoor* loose parts, possibly due to the combination of loose parts and inspiration of the natural environment enhancing freedom and children's inventiveness. This however initiates further thinking around loose parts within the indoor environment. Research has also prompted further studies around educator's perceptions on the use of natural environments and loose parts. An educator resource could also be developed that promotes reflective thinking and guides authentic use off loose parts in both outdoor and indoor settings.

THEORETICAL FRAMEWORK
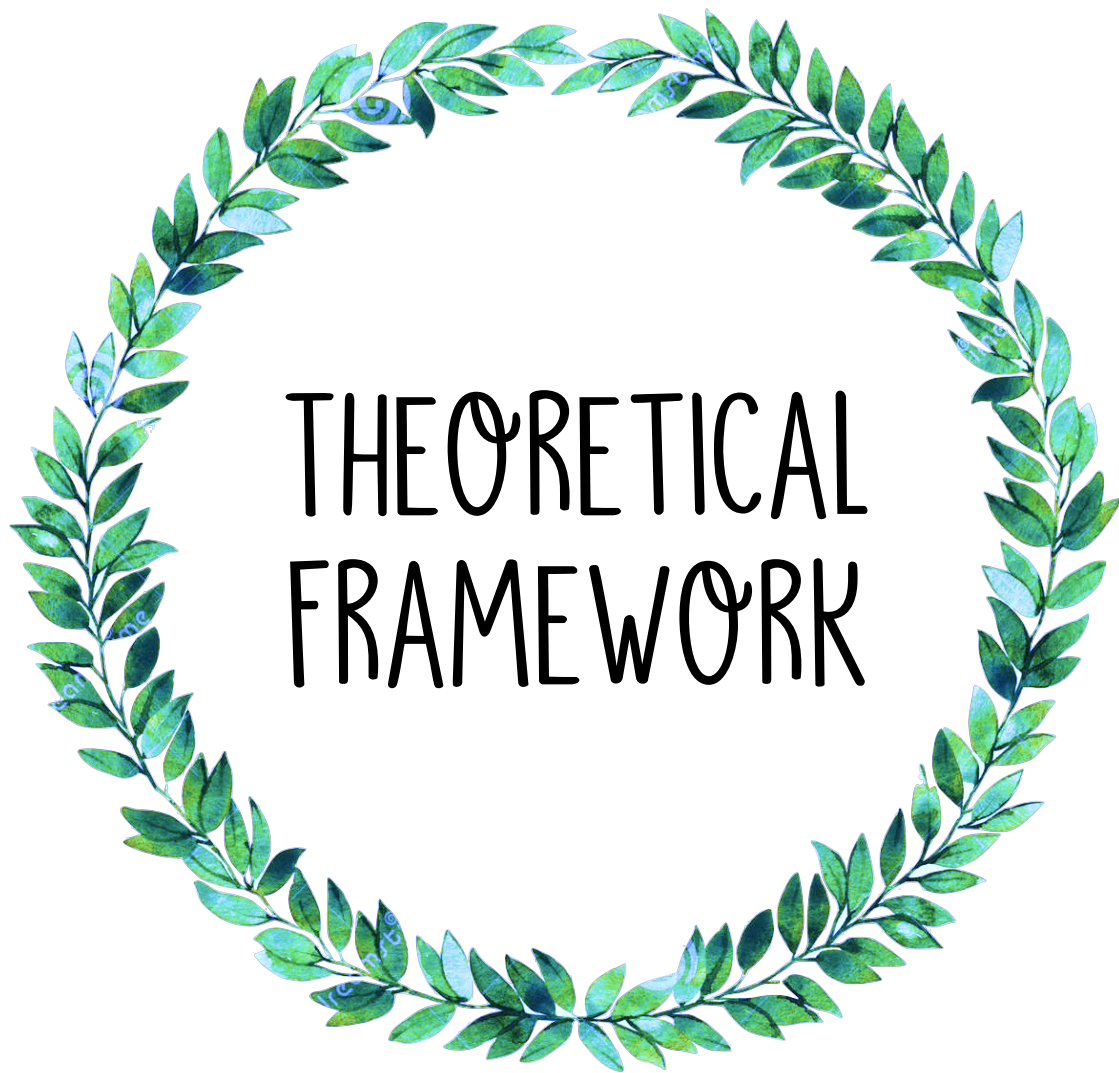
Chapter 3: Theoretical Framework

3.1 Theoretical Frameworks

The theoretical frameworks in this chapter will support and help to explain and understand the research presented with in this study. When exploring which theoretical frameworks would suit loose parts theory, there were three that stood out. In relation to the loose parts theory Vygotsky's Zone of Proximal Development (ZPD), Reggio's environment as a 'third teacher' theory and Malaguzzi's 'Image of the Child' gave a strong framework for this project. In figure 3.1, the three frameworks are displayed demonstrating the notion that they are interconnected throughout the loose parts theory.

Figure 3.1 Theoretical Frameworks
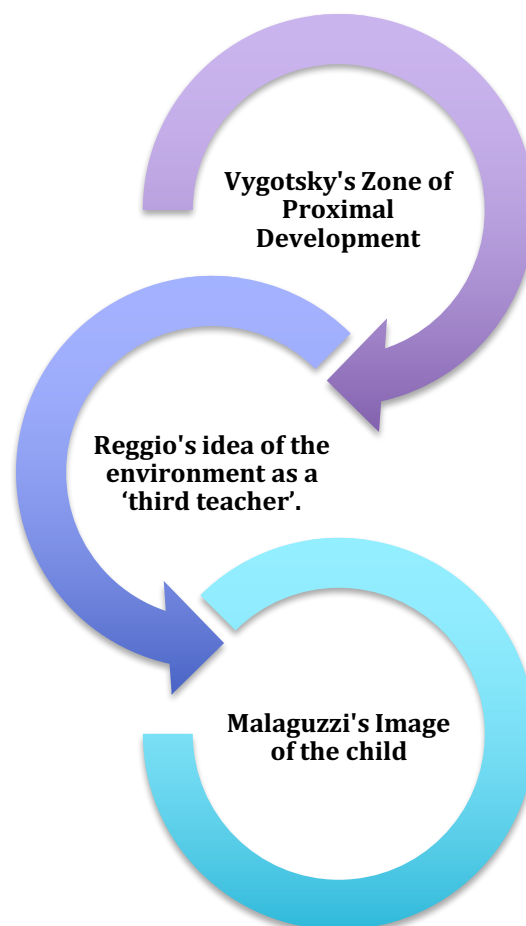
3.1.1 Vygotsky's Zone of Proximal Development

The Zone of Proximal Develop is the distance between what a child is able to perform alone with independent problem solving and what they can potentially do in collaboration with more experienced peers or adults as seen in Figure 3.2 (Kozulin et al., 2003). Part of the educator role with loose parts is scaffolding with questioning, thought provoking prompts, modelling and feedback, these assist the child to self- learn (Sanders & Welk, 2005). Children will also learn through social interactions with more knowledgeable or experienced peers, which is naturally occurring with loose parts. Vygotsky believed that to encourage and advance individual learning, experiences should be provided in their ZPD (Sanders & Welk, 2005). This generally occurs with loose parts when children are manipulating, negotiating, problem solving and collaborating on games, creations and ideas (Fjortoft & Sageie, 2000). Basically, the more materials there is, the more people can interact and learn from one another (Fjortoft & Sageie, 2000).

Figure 3.2 Zone of Proximal Development

What the child can't do even with guidance

Zone of Proximal Development (What the child can do with guidance)

What the child can do alone
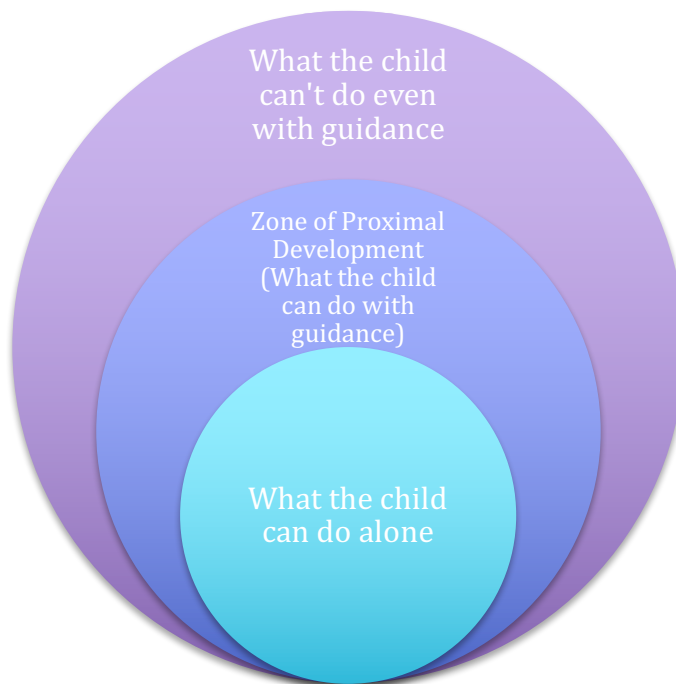
(Adapter from Innovative Learning, 2011).

3.1.2 Reggio Emilia's the Environment as a 'Third Teacher'

Reggio Emilia identified the environment to be the third teacher between children, educators and parents (Strong-Wilson & Ellis, 2007). It focuses on how the space can be thoughtfully arranged to influence what and how children learn (ACECQA, 2016). The environment is more than a visual, it is how children perceive and use the space to create meaning (Strong-Wilson & Ellis, 2007). It should foster and encourage; communication, relationships, inclusion, independence, collaboration, investigation and curiosity (ACECQA, 2016). These are evident in environments that include loose parts and allow children to be active contributors to their learning and have control over their environment (ACECQA, 2016 and Strong- Wilson & Ellis, 2007). This theoretical framework links to loose parts as it emphasis the child-directed environments that are rich in choice and content and include a wide variety of resources and opportunities that provide a holistic foundation for exploring, learning and developing (Darragh, 2006).

3.1.3 Malaguzzi's 'Image of the Child'

The 'image of the child' refers to what people believe, understand and assume about children, which can include their capabilities, development, motivations, purpose and agency (Martalock, 2012). Malaguzzi believed that if children are viewed as curious, creative, competent, capable, intelligent and whole, then they will create their environments to reflect this (An Everyday Story, 2013; Martalock, 2012; and Penfold, 2016). When seeing children as competent, active constructors, capable of exploring complex and abstract ideas, it is the role of the educator to listen, uncover children's theories, challenge thinking, deepen their understanding and facilitate shared understanding between peers and adults (Martalock, 2012). This directly links to the role of the educators in the loose part theory (Veselack, Cain-Chang & Miller, 2013), while indicating the importance of the educators' perspectives in empowering children (Penfold, 2016 and Martalock, 2012). This theoretical framework links to loose parts as it emphasis children's ability to express their thinking, theories and ideas in many ways (Brown, 2015). Thus, the wide variety of loose parts affords for the diversity in experiences and support children to encounter many avenues for thinking, constructing, negotiating, developing and learning (Brown, 2015).

METHOD

Chapter 4: Method

This chapter will discuss background information and methods of data collection.

4.1 Introduction

This study aims to explore how an early childhood education and care service can successfully implement loose parts. The following sub-questions guide this study:

- How do resources impact children's play within a service?
- What are educators' views on an open-ended curriculum that incorporates loose parts?
- How can educators be supported to incorporate loose parts into a more open ended curriculum?

4.2 Research Design

This study has adapted a qualitative design as it is directly looking at the natural setting of a preschool service and collects data from educators and children to create a better understanding of what is happening (Kervin et al., 2016). A triangulation data collection approach is used in this project to allow multiple perspectives of data to be collected to gain a comprehensive and coherent understanding of how to successfully implement loose parts (Kervin et al., 2016). Forms of data collection will include; observations of children's play, educator questionnaires and an interview with two loose parts specialists from Centre in Darwin. From the three data collection methods, forms of action will be developed based on the findings that suit the preschools needs. This qualitative study will be carried out at Wollongong City Community Preschool with children and educators that attend.

4.3 Background Knowledge

Prior to data collection the following information was identified. At Wollongong City Community Preschool educators are made up of an Early Childhood Teacher (ECT), 3 Diplomas and 1 Cert III in Early Childhood Education and Care and have 50 years of experience between them. When bringing forth the idea of Loose Parts for a project topic, the director (ECT)

stated she had prior knowledge. This educator was the only participant completing the questionnaires that is known to have had prior knowledge.

The interview will be conducted with Carly and Nicola, who I have previously worked with in the same room implementing loose parts. Carly and Nicola have 20 years of experience between them and hold a diploma and an ECT qualification. They have spent the past two years successfully implementing loose parts in their 4-5-year-old room and engaging their entire Centre in the practice. They were willingly recruited to do an interview for this project understanding they may be quoted, named and referred to.

4.4 Participants

Wollongong City Community Preschool was purposefully selected to participate in the data collection as part of the Professional Partners in Practice program at UOW. Observations will concentrate on children's play in two learning environments, the indoor play dough table and the outdoor sandpit. Educators are encouraged to complete the questionnaire, however understand it is volunteer. The interview will be conducted in Darwin with former colleagues on how they successfully implemented loose parts at their service. These three forms of method will structure the data collection for this project and aim to answer how educators can effectively implement loose parts in an early childhood education and care setting.

4.5 Data Collection Methods

This section will discuss the data collection methods further, as displayed in Figure 3.1.
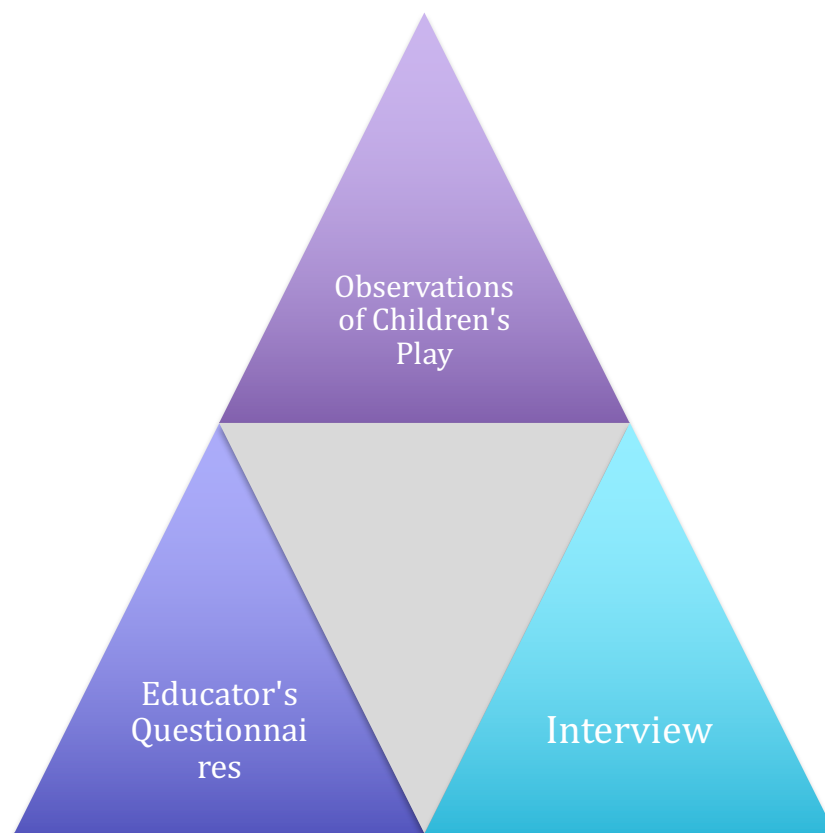
Figure 4.1 Triangulation Data Collection Methods

4.5.1 Observations

Observations were chosen as a data collection method to develop a deeper understanding of what is naturally occurring in children's play in an early childhood setting (Kervin et al., 2016). It will allow me to experience the play, gain an insight of interpersonal behavior and take note of unusual aspects that may impact the project (Kervin et al., 2016).

The purpose of the observations is to explore the engagement, free expression and open ended affordances of children's play that their current resources offer and what children's play demonstrates with implemented loose parts. An observation table will be completed to identify the resources available to children, how they engaged with them, the time spent at the area and the affordances of the play in regards to interactions amongst peers and outcome

of play (Appendix 1). Loose parts theory identifies the importance of the creative process rather than the final outcome (Nicholson, 1971), thus in the observations of children's play, the 'outcome of play' is referred to what experience children get out of the play episode, such role play, trial and error or experimenting.

Children at Wollongong City Community Preschool that will be included in this observation will be randomly observed based off who is playing in the area at the time. Children or parents are not going to be asked for permission, as their identity is kept anonymous and observation are based on their play and not their individual characteristics. This also allows children to play authentically.

 Observations of the sandpit and playdough table will be taken in their current set ups during the first week and in the second week, loose parts will be added or replace close ended resources in the two areas prior to the second observations. Resources such as shells, cinnamon sticks, corks, gems, wooden pegs and small wood slices will be added to the playdough table. Equipment at the playdough table that has one purpose and limits the imagination will be removed (Keiwra & Veselack, 2016). Loose parts that will be added to the sandpit are shells, cinnamon sticks, rocks, pinecones, wood cut offs, coral, buckets and spades. The resources chosen were inspired by Kable's 'Theory of Loose Parts' article (Kable, 2010). The observations were conducted on the Mondays and Fridays over two weeks in May (8th-19th).

4.5.2 Questionnaire

A questionnaire has been chosen to effectively identify all individual educator's attitudes, perspectives and knowledge around an open-ended curriculum and loose parts (Kervin et al., 2016). The questionnaire aims to understand how educators view their centre and current practice, what they know about open-ended curriculums and loose parts and prompts to get them thinking about implementing loose parts (Appendix 2). While the questions aim to gather data of educator's current knowledge, questions also gave information about loose parts to encourage their understanding and cater for all educators' knowledge and experience (Kervin et al., 2016). Educators were made aware of the confidentiality of the questionnaire and of its purpose. The

questionnaire consists of 8 short answer questions, 4 multiple choice and 1 visual response question (Appendix 2). A hard copy of the questionnaires were distributed to all educators on 15th of May and were given a month to complete.

4.5.3 Interview

An interview was chosen as a method of data collection to elicit more-detailed information and gain a rich understanding of loose parts and how to implement it successfully within a service (Kervin et al., 2016). The 10 interview questions provoke discussion around strategies to successfully engage educators in the implementation process and reflect on loose parts. Additionally, it provokes discussions around their experience in implementing loose parts, the strengths and weaknesses of the process and their recommendations.

The interview was conducted through a private Facebook group to cater for our conflicting schedules. This still allowed Carly and Nicola to talk freely about their ideas and viewpoints in the comments, extending on each others discussion. The questions were posted on the 21st of July and dialogue concluded by the 30th of July.

FINDINGS

Chapter 5: Findings

5.1 Introduction

This chapter will display the findings from the following three methods of data collection:

- Observations of children's play
- Educator Questionnaire
- Interview with Loose Parts specialists

The findings from each method of data collection will be presented individually. The observations display what resources are available to children and how they use them (Appendix 1). The educator questionnaire gives an insight into educator's knowledge, understanding and views on their current curriculum and loose parts (Appendix 2). The interview provides guidance on how to support educators to successfully implement loose parts into their curriculum (Appendix 3).

5.2 Observations

Observations were taken of children at the playdough table and in the sandpit to determine the effects of the resources available on their play. The first series of observations were to determine the children's play with current resources, as described in the methods chapter. The second series of observations were of the children's play with the implemented loose parts. Children's identities were kept anonymous, only recording the features of their play. Observations at the indoor play dough table were taken in the morning during free play and observations in the sandpit were taken in the afternoon also during free play. Prior to the observations commencing, an educator indicated that the playdough table was set up in a kitchen like environment as it is a current interest of children.

5.2.1 Observations of Current Learning Environments

Observations of the current resources at the playdough table and sandpit were recorded, as seen in Table 4.1.

Playdough Table

Observations of the playdough table found it to be a popular indoor learning environment amongst children as it was continuously occupied. At the playdough table, children were predominately engaged in the kitchen themed role play, such as eating, making cakes, cookies and fruit, all while making dialogue about sharing resources, what they were making and 'putting the cookies on 300 degrees in the oven'. Some children however, used the playdough to create; various animals, 'beds for all the children' and an 'elephant bed', these children were isolated from the kitchen role play discussions. During the observation, bilingual children engaged in deep discussion that couldn't be recorded due to the language barrier. Their gestures indicated it was about their playdough creations. Children engaged in this for a minimum of 25 minutes and some for over an hour.

Sandpit

In the sandpit children primarily engaged with digging holes and transporting sand in their dump trucks, with educator assistance sand castles were also built. Social interactions were about sharing the minimal resources, which in turn caused feuds amongst peers. Children didn't spend more than 10 minutes at a time in the sandpit.

Table 5.1 Standard resources available to children

Resources Available at the Playdough Table	Resources Available in the Sandpit
• Rolling pins • Bowl/ plates/ basket • Cutlery • Cookie cutters • Pizza cutter • Cook book	• Buckets • Spades • Dump trucks

5.2.2 Observations of Learning Environments with Loose Parts

Loose parts were implemented at the playdough table and in the sandpit, Table 4.2 displays the resources that became available to children. Children still had access to the standard resources.

Table 5.2 Loose Parts Implemented for Children

Loose Parts Resources that were added to the Playdough Table	Loose Parts Resources that were added to Sandpit
• Shells • Cinnamon sticks • Corks • Gems • Wooden pegs • Small Wooden slices	• Shells • Cinnamon sticks • Rocks • Cane ball • Pinecones • Wood cut offs • Coral • Corks • Traffic cones

Playdough Table

Primarily, children were engaged in exploring the objects at the playdough table before they begun creating. The loose parts in conjunction with the playdough were used to build;

- 'I'm making a garden'
- 'I'm making a cake with special ingredients' (using two shells)
- 'I made a boat'
- 'I'm making cookies' (stirring playdough in a bowl with the cinnamon sticks)
- 'A whistle'
- 'I'm icing my cake' (using gems)
- 'Salad wrap' (using gems as filling)
- 'I'm making a flower' (using the gems)
- 'I'm making a pizza' (using corks, gems, shells and wooden slices as toppings)
- A child used the playdough to stick the gems together to create a tower
- 'Lollipop'
- Various children made faces using the loose parts

Some children just stuck multiple loose parts into the playdough or used the playdough to hide objects then 'look for the treasure'. The cinnamon sticks were used for chopsticks, candles on a cake, a sail on a boat, stirrer and a 'chees stick' as seen in Figure 4.1. Children used the shells as eggs in the cake mixes as they cracked the shells on the side of their bowls before putting into the 'cake mix'. A child looked through the cook book and found a recipe for Tuna Chowder, they then started to create it using loose parts as the ingredients; gems as the tuna, playdough as the rice and soup and the wooden slices as the onion shown in Figure 4.1. Children continued to follow their interest of cooking with the use of the loose parts to decorate or use as ingredients, though it was evident various other types of food other than cakes and cookies were made not to mention the various other creations. Adding loose parts enhanced children's experience, creativity and imagination of what to create with the loose parts and the playdough. Interactions amongst children involved sharing objects and observing what their peers were creating, other than this, children mostly concentrated on their creations. The engagement time at the playdough table ranged from 40 minutes to just over an hour.

During the observation, an educator removed a child with additional needs from another area for disrupting others, guiding him to sit at the playdough table. This child explored the various loose parts quietly and experimented with the different prints the materials left on the playdough.

Figure 5.1 Children's Playdough Table Creations

Loose parts imprints

'I made a boat'

Making faces

Tuna Chowder with chopsticks

A Garden

'I'm icing my cake'
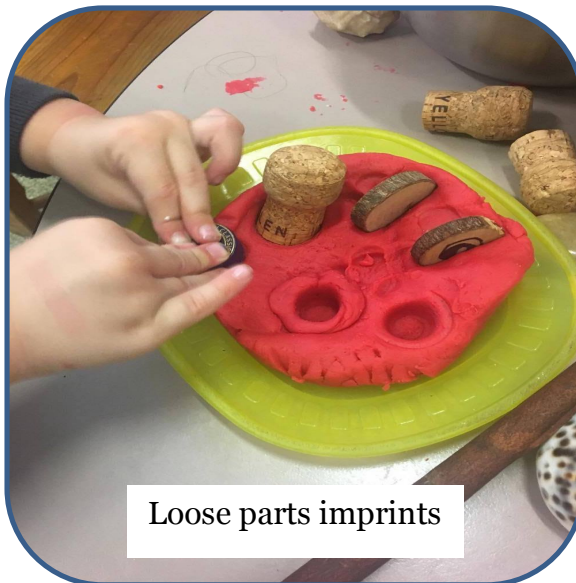
Sandpit

In the sandpit, loose parts were added, however children still had access to the standard resources. Children's first reaction when seeing the sandpit with the loose parts were;

- 'My preschools different!'
- 'Our wish just came true'
- 'A coconut!'
- 'Popcorn ball'

Children predominantly explored the items by burying them in sand, sorting them, listening to the shells or experimenting with what the resources could do. Children used the loose parts to create forests, represent their family, use them as stepping stones to avoid the 'lava' and to open a shop to 'sell everything in the whole world even bow and arrows'. Children bought the dump trucks into the sandpit and filled them up with rocks and corks to transport. For over an hour there was 8-10 children in the sandpit engaged in various play episodes. Children were constantly interacting with one another for role play, idea collaboration or social purposes. Figure 4.2 gives a visual of children's play.

Figure 5.2 Children's Sandpit play

'My family'

Stepping stones over lava

A forest

Sorting

The shop that sells everything

Another forest

5.2.3 Educator Implements a Loose Parts Table

The director implemented a loose parts table after our discussion about my project. Educators and children's responses of this table were documented to strengthen data collection.

A collage trolley was used to display various 'loose parts' that consisted of; pine cones, sticks, gems, feathers, wooden pegs, wood slices and shells. Children immediately started to explore these items and take them into the jungle animal area and to the play dough table. Each time this happened educators reminded the children that the loose parts had to stay at the table. The following week, I asked the director how the loose parts table went, she said they had to remove most the loose parts due to a child with additional needs that tends to scatter things over the floor. When asked how she was going to continue and which direction she was going to take, the director said it was up to me and my project.

5.3 Questionnaire

Initial information that was identified prior to the questionnaires was that one educator had knowledge of 'loose parts'. From the 5 questionnaires distributed, 4 were returned.

Educators were asked to select, from a range of options, what they believe describes their current preschool, this is demonstrated in Table 4.1. This table demonstrates the conflicting view educators have of their Centre, with co-construct, spiritual, agency, empowerment and collaboration showing the greater imbalance.

Table 5.3 Aspects that educators believe relate to their current preschool.

Words	Educators
Structures Groups	4
Inclusion	4
Co-Construct	2
Critical Reflection	4
Scaffold Learning	3
Spiritual	0
Child Directed	4
Holistic	3
Manipulative Toys	3
Supportive Relationships	4
Engaged Learners	4
Community Involvement	3
Agency	1
Intentional Teachings	4
Free Play	4
Diverse	3
Open-ended	3
Play Based Learning	4
Flexible	3
Children's Voice	4
Empowerment	2
Positive Guidance	3
Collaboration	2

When asked to think about the different learning environments and the intent behind them, the 4 educators indicated that they all have strong intent behind them and each stated an area they believed engages children the most. Three educators agreed the dramatic play is an engaging area for children, describing it to capture children's interests, creativity, friendships and imagination, while facilitating their social growth, emotional development, imagination, conversations and supporting children to transfer knowledge from one context to another. One of those educators also believes the play dough table is also engaging as it provides a tactile and manipulative play experience that develops fine motor skills, imagination and social skills. The final educator indicated they believe the jungle animal area is most engaging as it is a current interest of the children. All educators display an understanding of loose parts and an open-ended curriculum from the multiple-choice and the short answer questions.

When educators were asked how loose parts should be displayed, 3 out of the 4 indicated they should be incorporated into the current learning areas, permanent resources in the outdoor environment and be accessible on shelves for children. None of the educators indicated loose parts should be accessible to wide open spaces. A contradicting finding was that only 1 educator stated they thought loose parts should be displayed on a dedicated table.

Educators were asked what role they thought loose parts should play in the curriculum and 3 out of 4 believed that loose parts should be embedded into the curriculum and should be a 'big staple' of the learning areas. The 4th educator stated that it depends on the children.

Educators suggested the following loose parts items should be added to the outdoor environment;

- Rocks
- Wood
- Bags
- Bottles
- Tubing (PVC)
- Buckets
- Blankets
- Water
- Branches/leaves/twigs/nuts
- Tyres (both loose and set)
- Plants
- Collected items from external/internal environments by children

Educators suggested the following loose parts items should be added to the indoor environment;

- Cardboard boxes
- Tree trunks
- Natural resources
- Stones
- Large rocks
- Charcoal/ Red rock for drawing
- Grass
- Fabrics
- Crates
- Sticks
- Large Leaves

When educators were asked what they believe the benefits of loose parts are, several words were identified, displayed in Figure 4.1. The wide range of words used demonstrates the vast understanding educators have of loose parts. The common words that educators used were creativity, agency, imagination and communication.

Figure 5.3 Words used to describe the benefits of Loose Parts
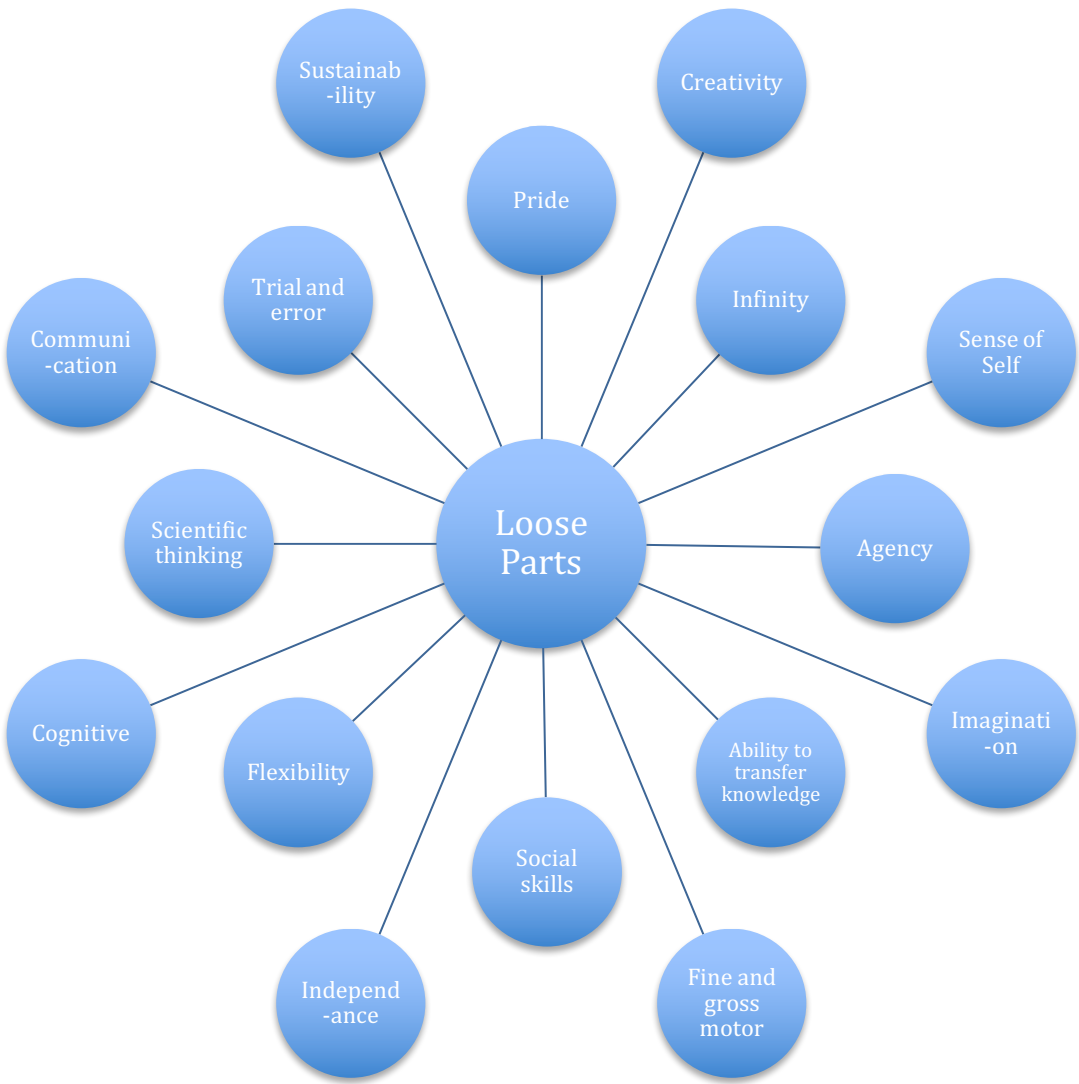
The idea of a loose parts resource was put forward to educators with the following suggestions; power point, articles, brochure, poster, interactive game, partnerships built with local sources. Educators agreed that any of the above resources would be of value.

Two final comments were left at the end of the questionnaires, first one stating 'I think this is a wonderful initiative and I'd be so happy to implement and learn more' and the second expressing 'I think children do need some guidance as how to use loose parts appropriately, so they gain the maximum learning'.

There were two questions asked to determine the educators' understanding of an open-ended curriculum and the utility of open-ended resources at the service. The responses showed a misunderstanding, thus the two questions were left out of the findings in this chapter due to the lack of significance.

5.4 Interview

The interview was conducted on a private Facebook group where the questions were posted one by one for Carly and Nicola to converse in the comments to answer the question.

When Carly and Nicola were asked why loose parts would work in any service they said, 'because each child is so different, loose parts would allow children to interact how they would like, meaning every child has the chance to participate'. Then added that the vast range of supportive research also backed up their beliefs.

Carly and Nicola gave strategies for engaging educators in the concepts around loose parts and reflecting on their current practice and environment as followed;

- 'Ask educators about children's development. How are other recourses really encouraging children to use imagination or allowing them to develop concepts of maths and science in their own way. Puzzles are a really great example; if a child can't complete a puzzle does that mean they are behind? But with loose parts they can create their own structures/puzzles/ whatever they want. Not to mention puzzles are limiting children as they can only be completed in one way' - Nicola
- Ask educators to challenge their beliefs and reflect on the reasons for doing things. Asking 'why', will encourage them to understand why they do things. Especially why an educator interrupts play.
- Observe children with no interruption and see what they truly like/dislike. List what could be added and how it will benefit.

Carly and Nicola were asked for important things to remember when implementing loose parts, Figure 4,4 displays the five responses.

Figure 5.4 Important things to remember about loose parts

It's okay for children to make a mess

Loose parts is most valuable when uninterrupted

Loose parts should embrace sustainability and the community

It will take a while for children to gain an understanding of loose parts because there previously has been so many rules

Have an open mind and empower children
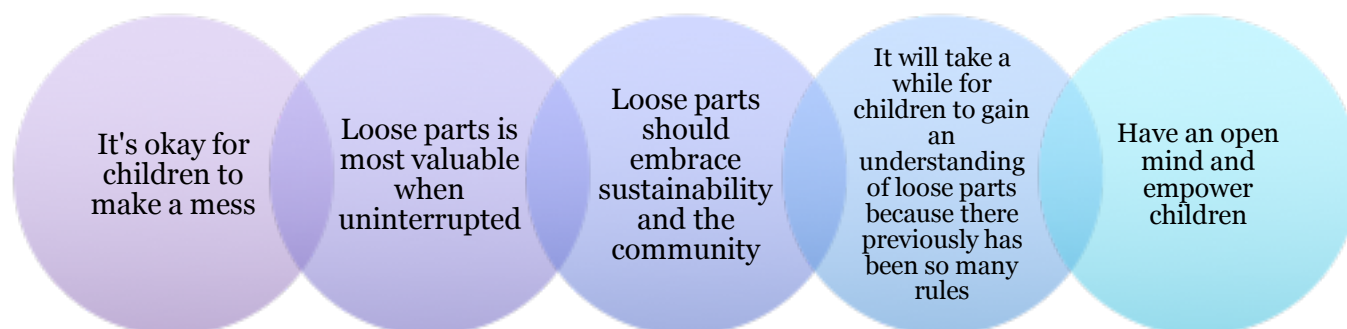
When Carly and Nicola were asked how to begin to implement loose parts they suggested;

- Begin looking around the rooms and write down all the loose parts currently available to children and what they could be used for. Repeat for the one-use items, this will give educators an understanding for loose parts and develop their knowledge.

- When sourcing and implementing loose parts start small by adding little bits to each area and observe what children do with them. Keep adding object that reflect what children are doing.

- Loose parts that you may like to first implement are sticks, stones, boxes, tubes and pipes, materials, shells or anything open ended from the op shop.

To teach children the concepts of loose parts Nicola said, 'educators shouldn't really be teaching children the concept of loose parts, the great part about it is that they can be made into or used for whatever the individual child wants' then Carly added 'you can lead by example if you are using smaller loose parts but having your environment set so that loose parts are throughout is the best way'.

In the interview, Carly and Nicola were asked what differences did they see in children after implementing loose parts, they both agreed the biggest thing

was the use of their imagination and coming up with their own play ideas. A change in children's' behaviour was also mentioned, 'possibly because there wasn't a restriction to the table, making children take responsibility for what they were using and gain a sense of independence because they could access it whenever they desired'. Carly added 'children obviously experiment and learn things in their own way, which is far more likely to mean something to them and stick with them'.

At the end of the interview Carly shared a memorable moment she has had while implementing loose parts. 'Children were playing at the table with sand, wood log blocks and glass coloured pebbles, bouncing ideas off each other and discovering things. One made a water pump, one made a water tower and another made a water park, each was very detailed and precise. One of the children pulled a block from under her creation and had a discovery moment when it didn't fall. It was then I could see there was so much learning out of something so simple and realized that lots of modern toys and resources are unnecessary and over rated'.

This interview demonstrated valuable information that can be utilised in the action at Wollongong City Community Preschool.

ANALYSIS

Chapter 6: Analysis

6.1 Introduction

This study aimed to determine how an early childhood education and care service can successfully implement loose parts. The following questions guided the research:

- How do resources impact children's play within a service?
- What are educators' views on an open-ended curriculum that incorporates 'loose parts'?
- How can educators be supported to incorporate loose parts into a more open ended curriculum?

The observations revealed how children's play was enhanced in creativity and imagination when loose parts were implemented. An unprompted implementation of a loose parts table demonstrated educators restrictive practice that lead to an unsuccessful attempt at implementing loose parts. The questionnaire identified educators' respectable knowledge and their ideas for implementation in their service, however these results reflect an imbalance in knowledge and practice. The interview announces knowledgeable insight to their experience, strategies to engage educators in reflective practice and steps to implementing loose parts from the beginning. These results indicate a need for professional develop around the loose parts and an ongoing reflective tool educators can engage with throughout the process of implementing loose parts. This study adds to the existing research around loose parts and further investigates how to support educators to successfully implement loose parts. In this chapter, these results will be compared, supported by literature and connected to theoretical frameworks. Several key themes were identified in this study to support the successful implementation of loose parts. The key themes are as followed:

- Educator Response
- Children's Play
- The value of the Environment

6.2 Educator Response

The educator response from questionnaires and observed practice shaped a contradicting result. Although the questionnaire displays an immerging understanding of loose parts and 3 out of 4 educators agree that loose parts shouldn't be restricted to the table, the observed practice demonstrates a different result. When the loose parts table was implemented by the director, all educators reinforced the rule that materials had to stay at the trolley. When children engage with a learning environment they should be able to access the resources they wish to use and have the space to play without restriction (Kiewra & Veselack, 2016; Curtis & Carter, 2003; and Kochanowski & Carr, 2014). From a critical theoretical perspective, it is questioned; why did they have to stay at that table? Was this allowing children to express themselves? Loose parts theory is all about allowing children the freedom to manipulate and use the resources however they want (Nicholson, 1971). From this it is clear to see the educators practice and response to questionnaires don't correspond, which may demonstrate the lack of knowledge around implementing loose parts, lack of confidence or that they just wished to be consistent when reinforcing the rules regardless of their knowledge.

One of the reasons for the loose parts table to be removed was because a child with additional needs would scattering the items over the floor. Instead of giving the child time to learn how to use them it was complete removed. This reveals educators lack of knowledge around the benefits of loose parts for children with additional needs. Wall & Dattilo (1995), have found loose parts provide a rich learning environment that promotes self-determination, sense of control, free expression and freedom of choice for all children (Wall & Dattilo, 1995). Much like what Carly states in the interview; each child is so different thus the loose parts resources allow for children to interact how they would like and ensure all children have an opportunity to participate (Kochanowski & Carr, 2014). Perhaps it would be beneficial for educators to consider Malaguzzi's philosophy on the 'image of the child'. This philosophy underpins the notion that children should be viewed as capable, competent and creative while supporting their active decision making in their play, ideas and environments (Nicholson, 1972 and Penfold, 2016). This will support educators in their practice with all children, giving them equal and

empowering opportunities. From this observation, it may be beneficial for this Centre to implement permanent larger scale loose parts in the outdoors to begin with for children to gradually be introduced to the concept. This also will address educators concern for loose parts spread across the floor and alter educators' perceptions of resources being accessible to wide open spaces.

The questionnaire demonstrated a conflicting view of the Centre where co-construct, agency, empowerment and collaboration were the words with the greater imbalance. These words are underpinned by the loose parts theory and are throughout the Early Years Learning Framework (DEEWR, 2009 & Nicholson, 1971), suggesting that the implementation of loose parts will encourage these aspects at the centre. Educators created a list of loose parts they would implement in the indoor and outdoor environments in the questionnaire. Many of these resources corresponded to those Carly and Nicola suggested to implement in the beginning, implies they have a satisfactory understanding of loose parts.

It's significant to understand loose parts is more than an activity but should be embedded into the curriculum. This will ensure children are supported in their agency, imagination, confidence and cognitive development throughout all aspects of the curriculum. Current research puts emphasis on the role of the educator to challenge children's thinking during loose parts play and provide a predictable environment and resources with long uninterrupted play periods (Kiewra and Veselack, 2016; Olsen & Smith, 2017; and Veselack, Cain-Chang & Miller, 2013).

This study has provided an opportunity to add to current research with a resource that will support educators to implement the loose parts theory into their curriculum successfully with discussion, collaboration and ongoing reflection.

6.3 Children's Play

The results from the observations were as expected and demonstrated children's enhancement in creativity and imagination. The observations reveal that each child had a different way of using the loose parts, for example instead of cooking pancakes and cupcakes children made; tuna chowder, a salad wrap and pizza, thus experiences were varied (Kochanowski & Carr, 2014). It was also interesting to note that children not only used loose parts to create things, they used them to represent things like family members, this can't be done with close ended resources that have a purpose (Kochanowski & Carr, 2014). Like Carly and Nicola said there is use of the imagination, limitless opportunities and the children came up with their own play ideas. The children's concentration was lengthened when loose parts were implement, which supports research (Fjortoft, 2001; Fjortoft & Sageie, 2000; Kochanowski & Carr, 2014; and Luchs & Fikus, 2013). Although research supports my findings in that loose parts supports imagination, creativity, independence, concentration etc., there is not much research that shows loose parts indoors which my research indicates. From the observations at the playdough table, it was evident children enjoyed having various materials to choose from other than the standard manipulating equipment (cutlery, pizza cutter and rolling pin).

The loose parts theory promotes social development and interactions, it provides the opportunity to collaborate and problem solve with peers (Kochanowski & Carr, 2014; and Neill, 2013). With that in mind, it was interesting that social play wasn't as prominent in observations, perhaps because children were exploring the new loose parts resources. This finding suggests larger loose parts in the outdoors may be beneficial for this service to promote collaboration and social play. The larger sizes and shapes of the loose parts will attract social interactions amongst children to manipulate, moves, problem solve and negotiate (Kochanowski & Carr, 2014). This will also support Vygotsky's socio-cultural theory, that children learn from social interactions and his idea of the ZPD. Children will be able to explore their individual capabilities, while learning from an older or more experienced peers with collaboration co-constructed knowledge (White, Hayes & Livesey, 2013).

6.4 Value of the Environment

From this research, the value of the environment has been prominent throughout data. The resources available to children in the environments are significant as this is what children are engaging with and have control over. If children are provided with close ended resources, they will essentially accept that this is the only way to use or do something, consequently reducing their creativeness, imagination, concentration and problem solving skills, which are necessary for later life success (Nicholson, 1971).

This theme links to Reggio Emilia's 'the environment as the 'third teacher'' theory, where the space educators provide to children should actively participate in the learning process of children and reflect the ideas, attitudes and cultures of children in the space (White, Hayes & Livesey, 2013; and ACECQA, 2016). It can be predicted that with the same mundane resources, children's creativeness will deplete (Daly & Beloglovsky, 2015). The observations of children's play demonstrated a significant difference in outcome with the implementation of loose parts. This suggests the standard resources available to children are only limiting them to a certain level of play, restricting children's creative expression. The environments at the Wollongong City Community Preschool, demonstrate children's interests, however doesn't tend to extend children in their own independent play. An environment should provide a space for complex relationships, social, emotional and cognitive development and allow children to explore ideas, thinking deeply, and investigative theories (ACECQA, 2016; Fjortoft, 2001; and Kochanowski & Carr, 2014). With the implementation of loose parts children can engage with the environment holistically.

In the questionnaire, educators stated that there is intent behind every learning environment, which is obviously applied by adults. Although this displays efficient programing, with a critical theoretical perspective; I wonder if children can create their own intent behind the learning environments. Does there need to be an intent? Why can't children transfer resources to all environments rather than limiting them to one, for example restricting the dress ups to the home corner. Research suggests accessibility and predictability, with freedom to use resources however and where ever the

child likes to be the most beneficial when using loose parts (Kiewra & Veselack, 2016; Curtis & Carter, 2003; and Kochanowski & Carr, 2014). This research promotes the idea that the environment, the resources available and the approach of educators to be the momentous foundation of implementing loose parts successfully.

With reference to the interview with Carly and Nicola, it would be beneficial for professional development to occur about the environment as a third teacher, loose parts and ongoing reflective practice, all of which will aid the preschool's implementation of loose parts.

6.5 Implications

The overall message that is drawn from this data is that educators are actively and willing to learning more about loose parts and how to implement it. While it is clear professional development on the environment and loose parts will be highly beneficial, an ongoing engaging resource would continue educator's discussion, collaboration and reflection through the implementation process. Furthermore, the sourcing of loose parts would help educators being their implementation process and build confidence and knowledge around how to do it themselves in the future.

6.6 Gaps in Research

From research and this current study, four gaps in research have become evident, these are as followed;

- Active investigation into the benefits of children with additional needs engaging with loose parts.
- Educators concerns, struggles and ideas when implementing loose parts. The role of the educator has been identified, thus how to implement the roles in a diverse team of educators with their own ideas, knowledge and experience is needed.
- Further research around the implementation of loose parts indoors.
- Further research around the loose parts in Australia, specifically in Australian Early Childhood Education and Care Services.

ACTION

Chapter 7: Action

7.1 Introduction

Since analysing the findings, I decide to implement three forms of action that I believe will best benefit WCCP. The three forms were decided with the consultation of Jane and mentioned to Mel (director and mentor), for feedback. The first form of action is to present a loose parts professional development session at the preschool for the educators at their August staff meeting. The second action, is an interactive reflective educator resource that the centre will receive to ensure ongoing engagement in loose parts. The third action is the sourcing of loose parts for the centre with the engagement of staff. All three forms of action aim to support educators to successfully implement loose parts in their service.

7.2 Action Designs

The action designs that will be implemented at WCCP include; a professional development presentation that will provide educators with further information on loose parts, a reflective resource that will support educators to continue quality loose parts practice and the sourcing of loose parts to begin the process of implementing. These action designs are displayed in Figure 6.1.

Figure 7.1 Action Designs

Loose Parts Professional Development	Reflective Educator Resource	Sourcing Loose Parts
• Based on what educators know and their willingness to learn a professional development session has been chosen to inform educators on loose parts and identify more ways to support staff in the reflective game. Throughout literature, the educator's role and the environment was a prominent finding, which will be addressed in the PD.	• From the findings, it was clear educators would benefit from an ongoing resource that promotes discussions, reflection and collaboration between educators. The educator resource will aim to ensure continuous reflection and engagement in quality loose parts practice. The interview with Carly and Nicola will also support this resource with the insightful information and strategies.	• To support educators in the implementing loose parts I think it would beneficial to source the first few lots of resources to demonstrate the various methods of connecting with the community and families to source them. This will also establish connections for the preschool to later link with when sourcing further loose parts.

7.2.1 Staff Meeting

With my personal experience implementing loose parts in Darwin, working with Carly and Nicola and from my extensive research around the topic, I feel confident and equipped to hold this professional development.

This professional development presentation that will provide educators with information on loose parts, current research, as well as strategies and examples on how to implement them (Appendix 4). The 10-page slideshow includes research themes from the literature review (Chapter 2), 2 engaging videos on, examples of my centre in Darwin and promotes to start thinking about sourcing loose parts. Educators will also receive a handout on 'open ended materials' for outdoor environments that was created by the Empowered Educator, this gives tips on getting started (Appendix 5). This was chosen to start educators to think about the outdoors specifically, and I begin to navigate how I can further support educators in the next methods of action. The first video discusses implementing loose parts in the park on some days with larger loose parts, which can be done at the preschool utilising the park and the second is on the innovative thinking that loose parts supports.

On the 23rd of August at Wollongong City Community Preschool staff meeting, I will present this to the educators and answer their questions and address their concerns that may arise.
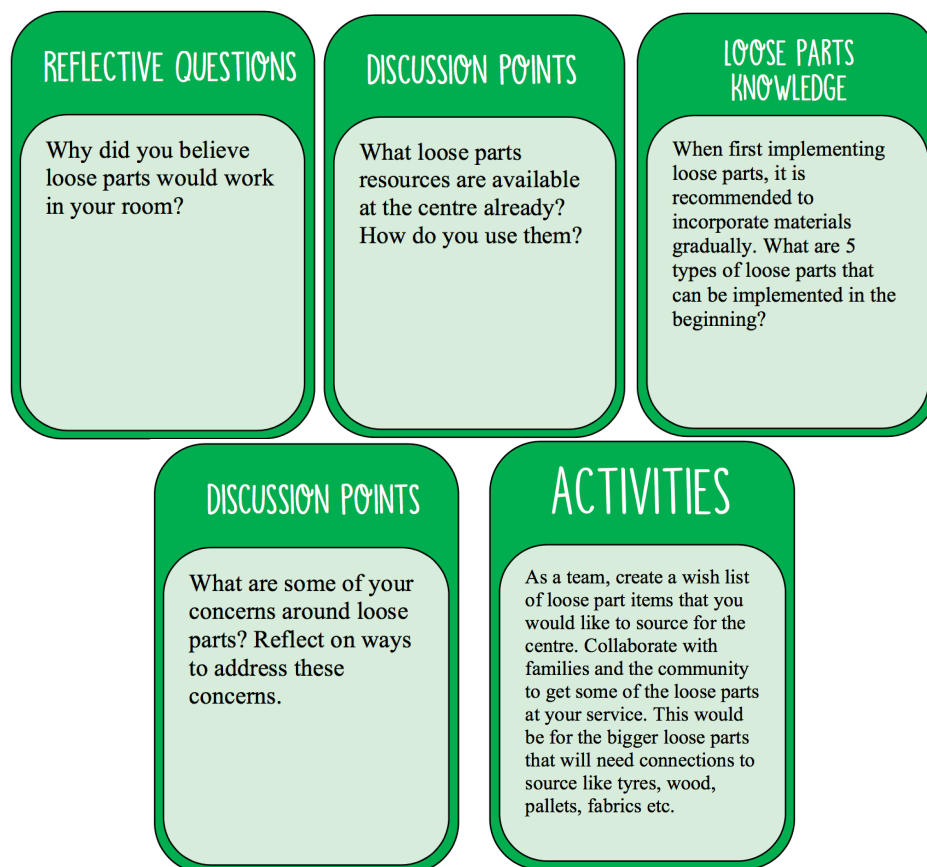
7.2.2 Reflective Educator Resource

This idea was inspired by the successful ACECQA 'Quest for Quality' card game (ACECQA, 2017), as the idea of a reflective card game immediately appeals more to educators. I collaborated with Carly and Nicola to come up with some of the reflective questions we believed were important to include. Most the information that was identified in the interview with Carly and Nicola has been a foundation to this game. The remaining cards, activities and discussion points I colligated are based on my knowledge from theoretical subjects at university, the research in the theoretical framework, what I believe the educators would benefit from and what I would like to reflective and engage on as an educator. The card game aims to encourage educators to implement quality loose parts practice in early childhood education and care, while engaging in reflective practice, research developmental theories and collaborative discussions (Appendix 6).

There are 5 sections to this card game resource; activities, reflective questions, discussion points, loose parts knowledge and wildcards. There are 12 *activities* – one for each month of the year that actively engages educators in reflective practice in their environment set ups. The 18 *reflective questions* promote discussion about practise with links to theories. The 20 *discussion points* were created to accommodate all educators and promote team relationships in addressing the various concerns, scenarios, knowledge and ideas that may arise from co-workers. The 11 *loose parts knowledge* cards give educators information on the topic before asking a reflective question. The 15 *wildcards* are fun questions to break up the reflective questions that support team bonding.

I decided to name the resource 'Loose Parts Open Mind'. The name of the game reiterates the idea that implementing loose parts involves having a reflective and open mind set, rather than a narrow view. This game also

promotes the inclusion of the community and families which supports the entire education and care service implementing loose parts.

This card game is recommended to be implemented during staff meetings. I arranged to attend the October staff meeting at Wollongong City Community Preschool and present the Reflective Educator Resource to the educators. I have chosen an activity and 4 questions to guide our discussions on loose parts in the meeting. These cards are as followed;

REFLECTIVE QUESTIONS

Why did you believe loose parts would work in your room?

DISCUSSION POINTS

What loose parts resources are available at the centre already? How do you use them?

LOOSE PARTS KNOWLEDGE

When first implementing loose parts, it is recommended to incorporate materials gradually. What are 5 types of loose parts that can be implemented in the beginning?

DISCUSSION POINTS

What are some of your concerns around loose parts? Reflect on ways to address these concerns.

ACTIVITIES

As a team, create a wish list of loose part items that you would like to source for the centre. Collaborate with families and the community to get some of the loose parts at your service. This would be for the bigger loose parts that will need connections to source like tyres, wood, pallets, fabrics etc.

7.2.3 Sourcing Loose Parts

I have decided to source a few loose parts to support the preschool in the beginning of their implementation process. The following methods of sourcing loose parts will be as followed;

- Visit the op shop.
- Connect with Wollongong City Council for wood cut offs.
- I have a connection to a friend that could help me source wood cut offs and sand them ready for children.
- Link to Spotlight for fabric scraps
- Mechanics for tyres

Before the end of the session I was able to complete 3 out of 5 methods of sourcing loose parts. The op shop visit resulted in a community connection with a lady who donated pinecones, corks and coral the following day. Through email and phone calls the Wollongong City Council was able to donate wood cut offs from a fallen tree they were removing. Educators have continued to source fabrics from Spotlight and have made plans to link with a local mechanic located next door.

EVALUATION AND RECOMMENDATION
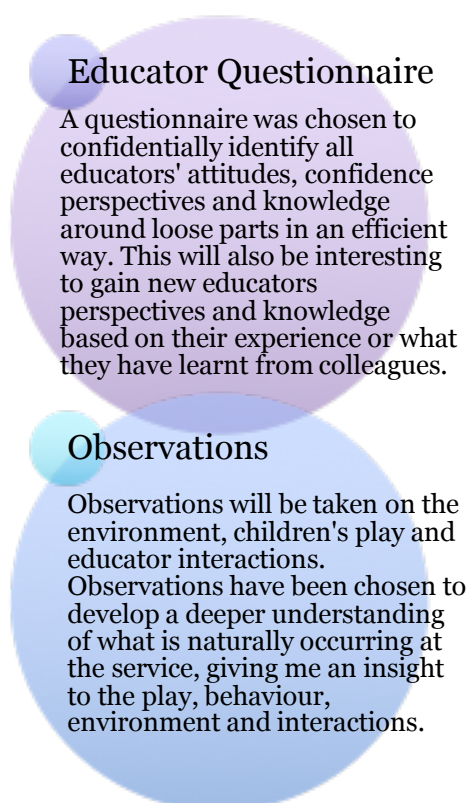
Chapter 8: Evaluation and Recommendations

8.1 Conclusion

This concluding chapter of this research action project will discuss the methods that will be used to evaluate the educators' confidence and practice, how the environment has changed and how children engage with it. Ideally, in 3 months the two evaluation methods would be implemented, however due to the time line of this project, this is not possibly. The questionnaire and observation methods will be discussed in detail in the following sections. This chapter will also discuss an overall evaluation of the implemented action and the project. To close the chapter, limitations and recommendations for further research will be examined.

8.2 Evaluation Methods

The educator questionnaire will aim to determine their confidence, knowledge and experience after 6 months. It will discuss what educators learnt in their process of implementing loose parts, if the reflective educator resource has assisted them and what their future goals are with loose parts, it will also address new educators (Appendix 7). The second evaluation method will be observations of the environment, children's engagement with it and educators' interactions (Appendix 8). The anticipated result of these two methods will hopefully show an improvement and optimistically successful implementation of loose parts. Figure 7.1 displays the two evaluation methods and why these were chosen.

Figure 8.1 Evaluation Methods

Educator Questionnaire

A questionnaire was chosen to confidentially identify all educators' attitudes, confidence perspectives and knowledge around loose parts in an efficient way. This will also be interesting to gain new educators perspectives and knowledge based on their experience or what they have learnt from colleagues.

Observations

Observations will be taken on the environment, children's play and educator interactions. Observations have been chosen to develop a deeper understanding of what is naturally occurring at the service, giving me an insight to the play, behaviour, environment and interactions.

8.2.1 Questionnaires

The educator evaluation questionnaire is intended to reflect on educator's experience over the past 6 months with implementing loose parts. In March of 2018, each educator at Wollongong City Community Preschool will be given a questionnaire (Appendix 7) and a week to complete. This questionnaire will link back to the initial data findings of the project, the professional development and the 'Loose Parts, Open Mind' educator resource. This will allow me to interpret how helpful the methods of action were and if educators feel confident and motivated. The questionnaire consists of 8 short answer questions, 1 Likert scale and another 4 short answers for new educators (Appendix 7). This will identify if the 'Loose Parts, Open Mind' educator resource supports all educators. The response from the questionnaires will determine the strengths and weaknesses as well as the effectiveness of the action. If the Loose Parts project has been abandoned, the questionnaire will be altered to determine why it has and what could have been done differently to support educators.

8.2.2 Observations

During the week in March 2018, observations will be taken of the environments, children's play and educators interactions in regard to loose parts. This is an informal observation and jotted notes will be taken on the more significant aspect over the course of the week. The observations aim to determine a change in children's behaviour and play with loose parts and examine educators practice. As seen in Appendix 8, observations will be taken on the learning environment, the loose parts available, children's play and interactions and educators interactions and practice. The data collected will identify if the actions methods were effective, ideas for loose parts and indirect feedback. As stated previously, if the preschool has not continued with loose parts in their service observations may not be required and the questionnaire will be used to identify where to go from there.

8.3 Evaluation of Action

When implementing a professional development and the 'Loose Parts, Open Mind' educator resource the educators responded positively and engaged in reflective discussions in both meetings. It was also worthy to note, in the professional development session, the educator that did not complete the questionnaire, was attentive and engaged in reflective discussion. Over time with further feedback, I would like to extend the resource with further questions and aspects. I think after the 6 months of educator use and implementation that the evaluation methods will assist me to examine the effectiveness and any gaps of my chosen action.

8.4 Evaluation of Project

Overall, I believe this action research project has been successful and beneficial. If this project hasn't served a purpose or benefit for the educators, it has served me as I have learnt more about loose parts and engaging educators, which reiterates the idea that reflective practice is ongoing and even with my experience with loose parts I am still learning. There is one thing I would change to obtain strong data collection and that is adding a

confidence question in the first questionnaire, to compare with how educators felt 6 months later with the implemented action and their own experience.

8.5 Limitations

The limitations of the study that may have restricted data are as followed;

- The study was conducted at one preschool with 5 educators, which does not represent the population of diverse educators in this profession.
- Observations were done over 4 days, thus not representing most children.
- In the observations, larger scale outdoor loose parts would have made for stronger data collection.
- The interview was done online, whereas an in-person interview may have identified further information.

8.6 Recommendations

The gaps in research were stated in the findings chapter (chapter 5.6), however this project could continue to address the educator's role in loose parts. With the use of the action methods, it would be beneficial to implement them in numerous early childhood education and care services across Australia in various settings to monitor the effectiveness and gain feedback. This would also link to a gap in research if implemented with services that have children with additional needs in attendance.
This will spread the awareness of the loose parts theory and support centres to implement it.

REFERENCES

References

An Everyday Story. (2013). *The Theory of Loose Parts*. Retrieved July 19, 2017 from http://www.aneverydaystory.com/2013/03/05/the-theory-of-loose-parts/

Atchley. R. A., Strayer. D. L., Atchley. P. (2012). Creativity in the Wild: Improving Creative Reasoning through Immersion in Natural Settings. *PLOS One*. 7 (12), 1-3.

Australian Children's Education & Care Quality Authority (ACECQA). (2016). *The Environment as the 'Third Teacher'*. Retrieved July 19, 2017 from http://files.acecqa.gov.au/files/QualityInformationSheets/QualityArea3/TheEnvironmentAsTheThirdTeacher.pdf

Australian Children's Education and Care Quality Authority (ACECQA). (2017). *NQF videos, podcasts and resources*. Retrieved on October 1, 2017 from http://www.acecqa.gov.au/national-quality-framework/nqf-video-resources

Big Fat Smile. (2015). *The Big Fat Smile Parent Handbook*. Retrieved October 1, 2017 from http://bigfatsmile.com.au/wp-content/uploads/2016/07/01049_BFS_Parent-Handbook_WEB.pdf

Bohling. V., Saarela. C., & Miller. D. L. (2010). *This never would have happened indoors: Supporting preschool-age children's learning in a Nature Explore classroom in Minnesota*. Dimensions Educational Research Foundation.

Brown. K. (2015). *Reggio Emillia Approach. Research Starters: Education* (Online Edition).

Bundy. A. C., Luckett. T., Tranter. P. J., Naughton. G. A., Wyver. S. R., Ragen.. J. & Spies. G. (2009). The Risk is that there is 'no risk': a simple, innovative intervention to increase children's activity levels. *International Journal of Early Years Education*. 17 (1), 33-35.

Curtis. D & Carter. M. (2003). Design for Living and Learning: Transforming Early Childhood Environments. *Redleaf Press*.

Daly. L. & Beloglovsky. M. (2015). *Loose Parts Inspiring Play in Young Children*. Redleaf Press.

Darragh. J. C. (2006). The Environment as the Third Teacher.

Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Belonging Being and Becoming: The Early Years Learning Framework for Australia*. Commonwealth of Australia.

Dockett. S. & Perry. B. (2006). *Starting School: a handbook for early childhood educators*. Baulkham Hills, NSW: Pademelon Press.

Etchingham. J. (2011). *Are we putting our kids under too much pressure?*. Retrieved October 3, 2017 from http://www.telegraph.co.uk/comment/8235111/Are-we-putting-our-kids-under-too-much-pressure.html

Fjortoft. I. (2001). The Natural Environment as a Playground for Children: The Impact of Outdoor Play Activities in Pre-Primary School Children. *Early Childhood Education Journal*. 29 (2), 111-117.

Fjortoft. I. & Sageie. J. (2000). The Natural environment as a playground for children: Landscape Description and Analyses of a Natural Playscape. *Landscape and Urban Planning*. 48, 83-97.

Garvis. S. & Pendergast. D. (2017). *Health & Wellbeing in Childhood (2nd ed.)*. Melbourne VIC: Cambridge University Press.

Gill. T. (2010). *Putting Risk into Perspectives*. Early Years Update. Retrieved July 19, 2017 from http://www.teachingexpertise.com/articles/putting-risk-perspective-10522

Innovative Learning. (2011). Zone of Proximal Development (Image). *Innovative Learning*. Retrieved from http://www.innovativelearning.com/educational_psychology/development/zone-of-proximal-development.html

International Play Association. (2012). *UN Convention on the Rights of the Child*. Retrieved July 19, 2017 from http://ipaworld.org/childs-right-to-play/uncrc-article-31/un-convention-on-the-rights-of-the-child-1/

Kable., J. (2010). *Theory of Loose Parts*. Retrieved September 15, 2017 from http://www.letthechildrenplay.net/2010/01/how-children-use-outdoor-play-spaces.html

Keiwra. C. & Veselack. E. (2016). Playing with nature: Supporting pre-schooler's creativity in Natural Outdoor Classrooms. *The International Journal of Early Childhood Environmental Education*. 4 (1), 70-95.

Kervin. L., Vialle. W., Howard. S., Herrington. J. & Okely. T. (2016). *Research for Educators (2nd ed.)*. Sydney NSW: Cengage Learning.

Kochanowski. L. & Carr. V. (2014). Nature Playscapes as Contexts for Fostering Self-Determination. *Children, Youth and Environments*. University of Cincinnati. 24 (2), 146-167.

Kozulin. A., Gindis. B., Ageyev. V. S., & Miller. S. M. (2003). *Vygotsky's Educational Theory in Cultural Context*. Port Melbourne, VIC: Cambridge University Press.

Liddle. E. A. (1965). *Pressures on the Young Child*. Association for Supervision and Curriculum Development. Retrieved October 3, 2017 from http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_196511_liddle.pdf

Little. H. & Wyver. S. (2008). Outdoor Play: Does avoiding the risk reduce the benefits?. *Australian Journal of Early Childhood*. 33 (2), 33-40.

Luchs. A. & Fikus. M. (2013). A Comparative study of active play on differently designed playgrounds. *Journal of Adventure Education & Outdoor Learning*. 13(3), 206-222.

Martalock. P. L. (2012). "What is a Wheel?" The Image of the Child: Traditional, Project Approach and Reggio Emilia Perspectives. *Dimensions of Early Childhood. 40 (3), 3-11.*

McLennan. D. M. P. (2010). Process or Product? An Argument for Aesthetic Exploration in the Early Years. *Early Childhood Educational Journal.* 38(2), 81-85.

Neill. P. (2013). *Open-Ended Materials Belong Outside Too!.* HighScope Foundation. Retrieved July 19, 2017 from http://www.imagineeducation.com.au/files/CHCECE018022/9.pdf

Nicholson. S. (1971). How Not to Cheat Children: The Theory of Loose Parts. *Landscape Architecture.* 62, 30-34.

Nicholson. S. (1972). The Theory of Loose Parts, An important principle for design methodology. *Studies in Design Education Craft & Technology.* 4(2), 5-14.

Olsen. H. & Smith. B. (2017). Sandboxes, Loose Parts and Playground Equipment: a descriptive exploration of outdoor play environments. *Early Childhood Education and Care.* 187 (5-6), 1055-1068.

Penfold. L. (2016). *Simon Nicholson on the Theory of Loose Parts.* Retrieved on July 15, 2017 from https://louisapenfold.com/2016/05/23/simon-nicholson-on-the-theory-of-loose-parts/

Sanders. D. & Welk. D. S. (2005). Strategies to Scaffold Student Learning: Applying Vygotsky's Zone of Proximal Development. *Nurse Educator.* 30 (5), 203-207.

Strong-Wilson. T., & Ellis. J. (2007). Children and Place: Reggio Emillia's Environment as Third Teacher. *Theory into Practice.* 46 (1), 40-47.

United Nations International Children's Emergency Fund. (2017). *A Simplified Version of the United Nations Convention on the Rights of the Child.* Retrieved October 2, 2017 from https://www.unicef.org.au/Upload/UNICEF/Media/Our%20work/child friendlycrc.pdf

Veselack. E., Cain-Chang. L. & Miller. D.L. (2013). *Young Children develop foundational skills through child-initiated experiences in a Nature Explore Classroom: A single case study in La Canada, California.* Dimensions Educational Research Foundation.

Wall. M. E & Dattilo. J. (1995). Creating Option-Rich Learning Environments: Facilitating Self-Determination. *The Journal of Special Education.* 29 (3), 276-294.

Waters. J. & Maynard. T. (2010). What's so interesting outside? A study of child-initiated interaction with teachers in the natural outdoor environment. *European Early Childhood Education Research Journal.* 18(4), 473-483.

White. F. A., Hayes. B. K. & Livesey. D. J. (2013). *Developmental Psychology: From Infancy to Adulthood.* Frenchs Forest, NSW: Pearson Australia.