SUSTAINABLE PEDAGOGICAL LEADERSHIP IN EARLY CHILDHOOD EDUCATION AND CARE: IMPLEMENTING THE 2012 AUSTRALIAN NATIONAL QUALITY STANDARD

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Keywords

Early childhood education and care, early childhood education for sustainability, education for sustainability, educational leadership, leadership, pedagogy, pedagogical leadership, quality, sustainability, National Quality Standard, early childhood curriculum
Abstract

This study emerged from the researcher’s growing awareness of the benefits of young children learning about sustainability (Wells & Lekies, 2006). This was supported by the introduction of two new quality areas in the Australian quality assurance system for Early Childhood Education and Care (ECEC) called the National Quality Standard for Early Childhood Education and Care and School Age Care ‘National Quality Standard’ or (NQS) (ACECQA, 2013) of sustainability and pedagogical leadership. These new areas meant that educators in the ECEC field were searching for up to date and relevant information and resources on these new topics. Hence the need for this study came to the fore.

As a result of this study I have brought the two quality areas of sustainability and pedagogical leadership together and coined the term Sustainable Pedagogical Leadership in ECEC (SPLE). SPLE includes principles embedded in sustainability and Education for Sustainability (EfS) combined with contemporary approaches to pedagogical leadership. Key characteristics of such leadership identified at the case study site include that it is dynamic and relational with a clear focus on sustainability learning outcomes. SPLE opens opportunities for educators to think broadly about pedagogies in relation to sustainability through ongoing learning and critical reflection. This represents an innovation in the way that pedagogical leadership can be framed in ECEC.

In order to explore how SPLE could occur two research questions emerged: How is quality Early Childhood Education for Sustainability (ECEfS) understood and enacted at the Green Leaf Early Learning Centre? and How did pedagogical leadership inform and support quality ECEfS at the Green Leaf Early Learning Centre? The area of ECEfS was used as a motif to explore how SPLE could be enacted at the case study site.

To define the terms in the research questions, pedagogical leadership in ECEC is collaborating with and mentoring educators, families and children to implement the shared vision and philosophy of the centre as well as guiding educators in the study of the teaching and learning process (Rodd, 2013). ECEfS is continual
transformational change through learning and taking action for sustainability in a holistic way encompassing environmental, political, economic, and social aspects so that options for future generations are not compromised (Davis, 2010a; UNESCO, n.d.).

To explore the research questions a qualitative, historical case study was enacted. This study drew on the experiences of the leadership team at the Green Leaf ECEC centre to identify the processes that emerged as they sought to understand, implement and embed National Quality Standard 2012 (NQS) 3.3 (Sustainability) and 7.1 (Leadership) in the centre.

Historical data were collected in December 2015 dating back to June 2012 which is when the centre opened. Background data included centre documents such as the centre philosophy, educational leader’s vision statement and quality improvement plans, as well as social media page entries and photographs of the site and of sustainable practices in action. The key data source was interviews conducted by this researcher with five educators consisting of two pedagogical leaders and three classroom-based educators with an interest in ECEfS at the site. This suite of data was aimed at establishing how educators understood ECEfS, what constituted quality ECEfS, and how the pedagogical leadership in the selected centre informed and supported educators in ECEfS.

The data were analysed using the six steps of thematic analysis identified by Braun and Clark (2006) and were interpreted using an interpretivist framework to explore and gain insights into the perceived understanding of participants (Rowlands, 2005).

The most significant finding was that the leadership team placed a strong emphasis on SPLE which supported educators to engage with sustainability across all its dimensions - environmental, social, economic and political. The sustainable pedagogical leadership practices so identified through this study revealed a range of ethical and inspiring practices. These included working toward a clear vision, engaging with educators through mentoring and critical reflection and empowering educators with rich and varied professional learning opportunities. Educators were provided with distributed leadership opportunities, encouraging them to have a voice, and this contributed to an inclusive organisational culture.
A minor finding was that educators’ understandings of the four dimensions of sustainability explored in this study expanded with the academic qualification of the educator. While the two pedagogical leaders articulated the full definition of sustainability, those less qualified at the centre cited the natural environment domain but they were beginning to recognise the full definition of sustainability as shown through professional learning and their resulting pedagogical practices.

Through SPLE, the development of educators’ pedagogical practices in ECEfS evolved over the course of the centre’s operation (2012 – 2015) to where these practices were rated in the 2012 NQS as ‘exceeding’ in 2013 then enculturated at the centre. Present and future planning in ECEfS showed evidence of the centre surpassing the NQS as educators moved from novice to expert roles.

This study concluded that SPLE and supporting pedagogical practices in ECEfS hold the potential to lead to high quality programs and helped to address the reported challenges for ECEC centres Australia-wide of implementing sustainability and pedagogical leadership.

Further research in pedagogical leadership has the potential to create new areas of professional growth and leadership for those on the journey of meeting the current requirements for ECEC in the NQS. This study may assist other centres to consider ways of providing SPLE as they progress on their own journeys to embed quality pedagogical practices in areas such as ECEfS.
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List of Abbreviations

ACECQA – Australian Children’s Education and Care Quality Authority
ECA – Early Childhood Australia
ECEC – Early Childhood Education and Care
ECEfS – Early Childhood Education for Sustainability
EfS – Education for Sustainability
EPA – Environmental Protection Authority
EYLF – Early Years Learning Framework
NQF – National Quality Framework
NQS - National Quality Standard
QIP – Quality Improvement Plan
SPLE – Sustainable Pedagogical Leadership in ECEC
Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

QUT Verified Signature

Signature:

Date: 8/11/17
Acknowledgements

This thesis is dedicated to my sister and friend
Anne Thompson 26/2/63 – 20/9/13
“We stopped when I saw the leaf I held it up so
we could see the light through it. We noticed
all the colours and the veins in it. We stood
there for at least five minutes looking at it.
He’d never really looked at something like that before.”

(Anne Thompson, inspirational ecocentric)

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Chapter One: Introduction

This study set out to explore how educators at an ECEC centre understood and enacted ECEfS and how the pedagogical leadership informed and supported educators in this process. The following section outlines the background for this study as well as the context of the research.

This chapter provides an overview of this thesis including the contextual background and rationale for this study, the aim of the research and the research questions, the literature review outline and the research design plan.

1.1 Background and context

1.1.1 Importance of high quality ECEC

High quality ECEC is considered a significant aspect of child development. According to the Australian Early Development Census (AECD) (DET, 2015), ECEC contributes to children’s physical, behavioural and social development for the present and for their future life outcomes. Neuroscientists such as Shonkoff, a Harvard professor with an interest in public policy affecting young children, along with other academics from Harvard including Duncan (education), Fisher (psychology), Magnuson (social work), and Yoshikawa (science education), have supported this notion, stating that “the experiences children have early in life—and the environments in which they have them—shape their developing brain architecture and strongly affect whether they grow up to be healthy, productive members of society” (National Scientific Council on the Developing Child, 2010, p.1). The Effective Provision of Pre-School (EPPE) study from the UK found that pre-school experience enhances all-round development in children (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2012). In a 2015 literature review of the impact of early childhood education and care on learning and development, the Australian Institute of Health and Welfare (AIHW, 2015) found that early education had a substantial positive short-term and long-term effect on cognition, social and emotional development, school progress and antisocial behaviour. Governments, societies and communities are increasingly realising the wide ranging social, economic, health and learning benefits of high quality ECEC for children as a foundation for lifelong learning and equality in learning and life opportunities. Thus, it is acknowledged that education does not start with school entry but rather from birth.
As a result of such research, international and Australian governments are taking action to support high quality in ECEC centres. The UK government, for example, from 2010 to 2015, introduced quality standards, more comprehensive training for educators, training and support for substandard centres, a revised learning framework called the Early Years Foundation Stage (EYFS), and provided free ECEC places for disadvantaged children. In the USA, the government improved access to ECEC, introduced quality benchmarks, increased ECEC programs for children aged birth to three years and expanded and refined a home visit program for disadvantaged children.

In 2007, the Council of Australian Governments (COAG) agreed to a partnership between the Australian Government and state and territory governments to introduce substantial reform in the areas of general education, work-related skills, training and early childhood development to improve human capital outcomes for all Australians. COAG developed a reform agenda reflecting its aspiration that children are born healthy and have access to the support, care and education throughout early childhood that will equip them for life and learning, while actively engaging parents and meeting their workforce participation needs. Consequently, a National Early Childhood Development Strategy, *Investing in the Early Years*, was developed in 2009 with a vision for 2020 that “all children have the best start in life to create a better future for themselves and for the nation” (p. 13). There are three elements to the strategy that form the National Quality Framework (NQF):

(i) enhanced regulatory arrangements for minimum operational requirements in ECEC centres;

(ii) a National Quality Standard (ACECQA, 2013) including a quality rating system for ECEC centres to drive continuous improvement and provide parents with robust and relevant information about the quality of care and learning; and

(iii) a national curriculum for ECEC aimed at establishing learning outcomes for children: the *Early Years Learning Framework (EYLF)* (DEEWR, 2009).

Under the *Education and Care Centres National Law Act (Queensland) 2011*, the NQF provides the process for rating and assessing ECEC centres against the NQS. The NQS (2012) sets out quality standards in seven key areas designed to promote continuous improvement in the quality of ECEC centres. The seven Quality Areas are:

- Quality Area 1: Education program and practice
- Quality Area 2: Children’s health and safety
• Quality Area 3: Physical environment
• Quality Area 4: Staffing arrangements
• Quality Area 5: Relationships with children
• Quality Area 6: Collaborative partnerships with families and
• Quality Area 7: Leadership and centre management

Of particular interest to this study were Quality Area 3 (physical environment particularly related to ECEfS) and Quality Area 7 (leadership and management addressing pedagogical leadership). While previous quality assurance documents such as the Child Care Quality Assurance system introduced in 1994 had covered similar Quality Areas, when the NQS was introduced in 2012, two new areas relevant to this study were included in the national document. The first was Quality Area 3, Physical Environment, Standard 3.3 entitled “The centre takes an active role in caring for its environment and contributes to a sustainable future” (ACECQA, 2013, p.99). Specific elements within this standard were Element 3.3.1 “Sustainable practices are embedded in centre operations” (p. 101) and Element 3.3.2 “Children are supported to become environmentally responsible and show respect for the environment” (p.102). These standards and elements asked that children be active in caring for the environment and that centre practices reflect this care with the view to contributing to a sustainable future. This study observed how ECEfS practices were enacted.

The second area of interest in this study was Quality Area 7, Leadership and Management. Standard 7.1 stated that “Effective leadership promotes a positive organisational culture and builds a professional learning community” (ACECQA, 2013, p. 172). A specific element relevant to this study was Element 7.1.4, which stated that “Provision is made to ensure a suitably qualified and experienced educator or co-ordinator leads the development of the curriculum and ensures the establishment of clear goals and expectations for teaching and learning” (p. 172). This element outlined the role of the pedagogical leader at the study site. This study looked at how pedagogical leadership informed and supported educators to implement quality ECEfS.

In 2014 and 2015, the Australian Government reviewed the NQS through its Productivity Commission Inquiry into Childcare and Early Childhood Learning. This occurred in the climate of economic research carried out by Pricewaterhouse Coopers in their report entitled Putting a Value on Early Childhood Education and Care (2014) which concluded that there was a compelling case that quality ECEC would pay economic dividends in the future. At the same time, another government report, the Australian Government Treasury Intergenerational Report
(2015) stated that without change the percentage of gross domestic product spent on early learning would fall to 0.3 per cent by 2044, showing the need to reform the early childhood system with increased investment. The report proposed that if access to quality early learning is improved it will amplify all children’s development and build Australia’s future prosperity.

Centres were finding meeting the NQS challenging in the two Quality Areas most closely related to this study: Quality Areas 3 and 7. The ACECQA Snapshot report (2017), stated that centres are less likely to achieve the NQS in Quality Area 3 - Physical environment and Quality Area 7 - Leadership and centre management than most of the other Quality Areas. Quality Area 3 was in position three and four and Quality Area 7 was in position seven out of a possible 58 elements for ‘Significant Improvement Required’ or ‘Working Towards’ ratings – the two lowest ratings (ACECQA Snapshot, May 2017, p. 16).

In 2017 the NQS is set for revision after the Productivity Commission report (Australian Productivity Commission, 2014) and reviews by academics, the not for profit and private ECEC sector, ECEC educators, families and community members. Quality Area 3 Physical Environment is one of the Quality Areas that will change. The third element, the focus of this study, has been reduced and incorporated into the second element. The words sustainable, embedded, future and respect have been removed. The element related to the study now reads that “the service cares for the environment and supports children to become environmentally responsible” (ACECQA, 2017). The effects of these changes will be seen as the new look NQS rolls out from October 2017. It could be foreseen that the new NQS may weaken ECEfS pedagogy with the deemphasising of the concept of sustainability in the element.

The second quality area of interest to this study is Quality Area 7. The element related to this study now reads that “The educational leader is supported and leads the development and implementation of the educational program and assessment and planning cycle” (ACECQA, 2017). This amendment is not foreseen to change pedagogical leadership at the centre when it is introduced in 2017.

The case study presented in this thesis examined pedagogical leaders’ and educators’ perceptions of how the ECEC centre addressed the NQS in the area of EfS. The study also examined the pedagogical leadership practices of informing and supporting educators to implement ECEfS in the centre.


1.1.2 Pedagogical leadership in ECEC

Interest in leadership as it pertains to ECEC developed from theory and research into leadership in school-based educational contexts during the 1960s and 1970s, and was eventually applied to early childhood educational settings. The next four decades saw leadership receiving only intermittent attention from early childhood authors and researchers. In the 1990s and 2000s authors such as Hujala (Finland), Waniganayake (Australia) and Rodd (UK) cemented the relevance and importance of leadership in the delivery of quality ECEC services (Hujala, Waniganayake & Rodd, 2013) through their seminal research and publications.

This renewed interest in ECEC leadership supported the introduction of a dedicated pedagogical educational leader in Australian ECEC centres. The Education and Care Centres National Regulation Section 118 (ACECQA, 2013) states that

the approved provider of an education and care centre must designate, in writing, a suitably qualified and experienced educator, co-ordinator or other individual as educational leader at the centre to lead the development and implementation of educational programs in the centre (p. 133).

An Approved Provider operates a centre and can be an individual or an entity such as a company, an association or a partnership.

This was the first time in Australia’s ECEC history that an educator would be specifically identified as a pedagogical leader with the task of leading others in curriculum development and implementation. This was significant because in the past this role was not specified so it fell to either the Director of the centre and/or a senior educator with little or no training in pedagogical leadership (Rodd, 2006; Thornton, Wansbrough, Clarkin-Phillips, Aitken & Tamati, 2009). With the introduction of the Educational Leader position, centres in Australia now have a legislated requirement to ensure that programs for children are constantly evaluated and through dialogue and critical reflection practices are improved in a continuous cycle. This imperative is driving interest in the area of pedagogical leadership in the ECEC field. However, Hard (2011), an ECEC educational leadership academic, cites a “paucity of ECEC people who see themselves as leaders and are willing to engage and articulate as leaders” (p. 6). Fonsen (2013) recognises that ECEC centre Directors must have a strong sense of pedagogical competence in order to be pedagogical leaders. Generating new knowledge about pedagogical leadership in the contexts where most early childhood educators work may be one way to engage leaders. This research, which explored how pedagogical leaders inform and support educators to implement ECEfS, may serve to add to this knowledge base. A key outcome of the study that is unpacked later in this thesis, is the new term Sustainable Pedagogical Leadership in ECEC (SPLE). SPLE is proposed as a way of
SUSTAINABLE PEDAGOGICAL LEADERSHIP IN EARLY CHILDHOOD EDUCATION AND CARE: IMPLEMENTING THE 2012 AUSTRALIAN NATIONAL QUALITY STANDARD

1.1 Quality assurance in ECEC

This study examined how pedagogical leadership informed and supported educators to implement quality ECEFSL at the case study site, Green Leaf Early Learning Centre. According to ACECQA’s Guide to Assessment and Rating for Centres (2014), as part of engaging in the NQS, centres take part in an NQS Assessment and Rating system in which they are rated according to their quality. Each centre completes a Quality Improvement Plan (QIP), a working document which identifies quality improvements that are being implemented through continuous improvement in each of the seven Quality Areas mentioned previously.

A centre is visited by an Authorised Officer from the regulatory authority from the state government’s Education Department when practices are observed, discussed and where relevant supporting documents are sighted. Visit frequency depends on the age of the centre and previous ratings. New centres are required to have their first Assessment and Rating within six months of opening (ACECQA, 2014) as was the situation at the case study site for this research. A centre is given a quality rating against the mandated standards which is awarded by ACECQA in one of five categories: excellent, exceeding, meeting, working towards, or significant improvement required. Subsequent visits by the Authorised Officer to the centre depend on the quality standard rating achieved. The better the rating, the more time until the next Assessment and Rating visit, indicating a level of trust that the centre’s quality will remain or surpass, through the continuous improvement process, the present rating.

The rating for each centre is published on the MyChild website (Australian Government, 2017), the Australian government portal which supplies information to families about topics such as types and locations of ECEC centres and cost assistance information. The rating is displayed at the centre as an indicator to families and educators of the current standard of the centre.

This Australian national policy initiative incorporated educational trends such as education leadership and Education for Sustainability (EfS) into the ECEC sector. For me, who has worked in ECEC as a teacher and for the last ten years as a tertiary vocational teacher in the TAFE sector
delivering ECEC qualification focused on sustainability, quality and leadership, these foci raised the following questions: What is quality in ECEC? What kind of leadership contributes to quality ECEC? and How might EfS contribute to ECEC quality? Seeking answers to such questions was the starting point for this study. This study resides where the topics of ECEfS, SPLA, and quality ECEC meet.

1.1.4 Case study site context

ECEC in Australia encompasses children’s holistic development and learning through and integration of education and care. ECEC incorporates a variety of formal services delivered outside of the home, including long day care (LDC), family day care, occasional care, outside school-hours care, and preschool. For the purpose of this research I have focussed on long day care centre and kindergarten because these pertain to the study site. These two service types are defined now (AIHW, 2016).

Long day care

Long day care centres provide care and education for children from birth to school age. Centres generally operate for at least 10 hours a day from Monday to Friday for a minimum of 48 weeks each year. Educators in long day care centres hold Certificate III and Diploma in Early Childhood Education and Care qualifications (See Table 1). In addition, at the case study site, some educators held Advanced Diploma and Bachelor of Education qualifications.

Kindergarten

Kindergarten approved programs in long day care centres operate as per long day care above and employ a Bachelor of Education trained teacher.

The above ECEC service types are delivered through government or non-government sectors, and include community and private, for profit and not-for-profit providers. Both service types offer education and care, with kindergarten often focused on more structured learning for children’s transition to school. The case study site is a private entity attached to a school where education and care are emphasised both in the long day care and kindergarten.

The table below sets out ECEC qualifications and definitions. Participants in this research possessed one of the qualifications below. This will be outlined in the Research Design chapter three.
<table>
<thead>
<tr>
<th>NAME OFQUALIFICATION</th>
<th>DEFINITION OF QUALIFICATION</th>
</tr>
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<tbody>
<tr>
<td>Bachelor Education</td>
<td>As early childhood specialists, graduates are prepared to work as qualified teachers in early childhood education and care settings, kindergarten, and Prep to Year 3 in primary school.</td>
</tr>
<tr>
<td>Diploma Early Childhood Education and Care or Advanced Diploma of Children’s Services</td>
<td>This qualification reflects the role of early childhood educators who are responsible for designing and implementing curriculum in early childhood education and care services. In doing so they work to implement an approved learning framework within the requirements of the Education and Care Services National Regulations and the National Quality Standard. They may have responsibility for supervision of volunteers or other staff.</td>
</tr>
<tr>
<td>Certificate III Early Childhood Education and Care</td>
<td>This qualification reflects the role of educators in a range of early childhood education settings who work within the requirements of the Education and Care Services National Regulations and the National Quality Standard. They support the implementation of an approved learning framework, and support children’s wellbeing, learning and development. Depending on the setting, educators may work under direct supervision or autonomously.</td>
</tr>
</tbody>
</table>

Table 1: ECEC Qualifications

1.2 Rationale for the study

This study set out to discover how educators at an ECEC centre understood and enacted ECEfS and how the pedagogical leadership informed and supported the educators in this process. In this section the rationale for this study is outlined in the topics of ECEfS in ECEC, leadership in ECEC and quality ECEC.

1.2.1 ECEfS in ECEC

The first aspect of this study’s rationale is a focus on early childhood education for sustainability (ECEfS). In 2009, Davis reported on the research gap in ECEfS regarding children acting for sustainability, specifically acting as agents for change. Davis stated that there was very little research in ECEfS specifically in relation to children in early learning settings. She noted that case studies were needed that showed “practice and evaluation studies of programs in non-
school ECEfS to find out what works, why and how, and what are the barriers and opportunities for implementing education for sustainability in early childhood” (p.15). The case study presented in this thesis helped address this gap because it examined how pedagogical leadership informed and supported educators to implement quality ECEfS in a before school setting.

1.2.2 Leadership in ECEC

The second aspect of this study’s rationale is its focus on leadership. Leadership in ECEC is an area of longstanding interest as mentioned above, and because there is a renewed focus on ECEC leadership in Australia due to the introduction of the legislated position of pedagogical leadership called the Educational Leader. Pedagogical leadership can be defined as collaborating with and mentoring educators, families and children to implement the shared vision and philosophy of the centre as well as guiding educators in the study of the teaching and learning process (Rodd, 2013). The legislation does not specify qualification, experience or employment tenure at the centre for this position. Pedagogical leaders could be the Director (supervisor or coordinator), an educator (qualified person that works directly with children), or in some cases an area manager of a chain of centres, or the owner of a private centre who may hold no formal qualifications.

Despite the longstanding interest in leadership in ECEC centres, the concept of leadership in embedding high quality practice with “educators regularly engaging in systematic critical enquiry and reflection about their work” (Rodd, 2013, p.201) is in its infancy in many centres. For other centres, sound leadership actions have already been occurring. Rodd (2013) contends that “all aspiring leaders – like early childhood educators – proceed along a continuum of development of professional knowledge, skill and understanding from novice and beginner to capable and confident, and some advance through to specialist, expert and executive” (p. 51). Rodd, (2006) argued earlier that educators do not always fully recognise their actions or identify themselves as leaders and in fact pedagogical leadership in ECEC has remained a relatively unexplored area of research (Ang, 2012; Muijs, Aubrey, Harris & Briggs, 2016; Thornton et al., 2009). The concept of reluctant leaders is explored further in the leadership section in Chapter Two of this thesis. This study positions the case study site as moving toward enculturation of practices and expert roles.

Effective leadership goes hand in hand with high quality programs resulting in a continuous cycle of quality improvement in pedagogical practices and therefore learning outcomes for children. According to Siraj-Blatchford and Manni (2007), in their Effective Leadership in the Early Years (ELEYS) study, effective leadership must be individually tailored
to meet requirements dependent on the external and internal factors that affect the centre. The new term SPLE, introduced in this thesis, is one aspect of how quality can be demonstrated. However, the literature review outlined in Chapter Two revealed limited research showing how leadership has contributed to a quality program for young children in the area of EfS. Furthermore, the very limited research that was located was not linked directly to the impact of NQS legislation. Elliott (2010) stated that further research avenues such as leadership for sustainability and organisational change in early childhood services are required. This study will be a point of difference from previous research in ECEC leadership as it links to ECEfS and the NQS, and therefore provides a timely addition to the current body of literature.

1.2.3 Quality ECEC

The third aspect of this study’s rationale is a focus on ECEC quality. Best practice in ECEC is a highly researched area, and multiple factors have been shown to support children’s positive developmental outcomes and provide social cost benefits. Harrison and Greenfield’s (2011) research conducted with 12 schools in Australia examined how schools incorporate Indigenous perspectives in Kindergarten to Year 6 with a view to identifying quality practice. They noted that while the large body of research about quality ECEC can inform practice, its relevance to the diversity of Australian contexts is questionable as most research was US based. They noted that particular gaps exist in relation to collaborative and integrated practices and leadership, teacher preparation and professional learning. This case study showed how the centre’s practices, pedagogical leadership and professional learning were applied and therefore helps to address these gaps.

Quality ECEC is not a clear cut set of characteristics of centre practices but rather it is a dynamic process. Australian ECEC researchers Logan, Press and Sumison (2012), from a post structuralist perspective, urge policy makers to consider accidents, contingencies, overlapping discourses, threads of power and conditions of possibility for the production of common sense in relation to quality, suggesting that it is not a one-size-fits-all concept. Other authors argue that a cultural lens should be applied to the NQS. For example, the Secretariat of National Aboriginal and Islander Child Care (2013), a national non-government peak body for Aboriginal and Torres Strait Islander children, state that preserving and enhancing the quality of Aboriginal and Torres Strait Islander ECEC centres must be undertaken through a cultural lens where each act of interpretation and assessment has a cultural dimension. Using a cultural lens to assess the current NQS may highlight areas of shortcoming or lack of understanding. Different world views of what constitutes quality may come to the fore which will need to be worked through and agreed
upon as a way to move forward to get the best possible ECEC outcomes regardless of location or background.

Therefore the NQS must be constantly reviewed and informed by robust research to ensure the best possible outcomes for children. A review of the NQF stated that systematic feedback from the consultation process of educators and families was supportive of the Framework but with improvements that needed to be made (Woolcott Research and Engagement, 2014). Changes forthcoming in the NQS in 2017 were discussed previously in section 1.1.1.

Drawing on other recent research, another new direction for quality in ECEC is the explicit inclusion of children’s voice informed by Harris and Manatakis’s (2013) Children’s Voices project. This study involved 350 children aged three to eight years across eleven Australian State Government regions. Their insights came from interviews, observations, document analyses, and artefacts created by children, all of which took stock of the voices and perspectives of all who were involved – children, educators, families and policymakers. The findings identified that children wanted to connect with and preserve the natural environment and this was one of the strongest themes. Other areas identified by children relevant to this study were for the inclusion of engaging built environments; spending time with families, friends and people; the importance of time for engaging play and activities; exploring and nurturing animals; healthy eating and cooking; changes for a better future and communication where young children can demonstrate their opinions. The areas identified by these children reflect the importance of process (spending time with families, friends and people) and structural quality (engaging with the built environment). Process and structural quality are explored further in section 2.3.1 below. Many of the children’s insights can also be applied to the EfS principles (DET, 2009) outlined in Table 2.

This section set out the rationale for this study. It showed that studies such as this are needed demonstrating effective ECEfS in the prior to school sector. Pedagogical leadership includes reflecting children’s voice, the individual centre philosophy as well as a wider societal view and it was acknowledged that centres are on a continuum of expertise in their pedagogical leadership. SPLE was put forward as a way to enact quality.

1.3 Research aim

The aim of this research was to explore educators’ understanding of quality ECEfS and how pedagogical leadership informed and supported educators to embed quality ECEfS pedagogical practices in a case study site.
Through investigation of this case, the pedagogical leadership practices at one particular site came into sharp focus and the term SPLE was coined. For this research, leadership in embedding sustainability into children’s learning programs as well as centre practices was the focus. Thus, findings of this research may assist both these particular educators and those in other centres who are working to embed quality ECeFS and other areas of quality into their programs.

This particular research drew together aspects of ECeFS, pedagogical leadership and quality ECEC. The 2012 NQS included ECeFS and pedagogical leadership as the most recently introduced areas in the legislation. ECEC centres that were grappling with these new requirements may benefit from this study as it illustrates how the centre’s pedagogical leaders informed and supported other educators to implemented ECeFS.

1.4 Research questions

This research explored how ECeFS was understood and enacted at the case study site - referred to as Green Leaf Early Learning Centre - and how pedagogical leadership informed and supported educators through SPLE in embedding ECeFS at the centre. As noted earlier, the research came about when new legislation in ECEC required that an Educational Leader guide educators in implementing the curriculum including ECeFS as part of the NQS. Thus emerged the three central topics of this research: understanding and enactment of ECeFS, pedagogical leadership and quality ECEC. These three topics addressed an identified gap in previous research and assisted the researcher to formulate the following research questions for this study.

The research questions for this study are:

Research Question 1:

*How is quality ECeFS understood and enacted at the Green Leaf Early Learning Centre?*

Research Question 2:

*How did pedagogical leadership inform and support quality ECeFS at the Green Leaf Early Learning Centre?*

To further clarify some of the terms in the research questions, pedagogical leadership in *informing* educators in ECeFS implementation included leaders facilitating the distribution of information to and between educators. Pedagogical leadership *supporting* educators in ECeFS implementation included leaders providing the opportunities and environment to allow ECeFS to flourish at the centre.
1.5 Literature

There were three topics of literature that provided a rationale for this study that were included in the literature review (Chapter Two). First, literature relating to sustainability, and specifically EfS within ECEC, were examined. This included the growing trend for ECEfS and the legislated requirement for EfS to be incorporated into ECEC in Australia in the 2012 NQS. Second, the topic of leadership was explored by examining definitions, contexts, theories, types, characteristics and actions of leaders with a particular focus on ECEC pedagogical leadership. The characteristics of leadership for quality, with particular reference to EfS, were also discussed where the researcher coined the term Sustainable Pedagogical Leadership in ECEC. Third, ECEC quality was examined specifically in relation to the NQS, as well as with reference to wider views and ideas about ECEC quality drawn from the research literature. The literature review shows how these three topics came together to illustrate how educators understood and enacted quality ECEfS and how pedagogical leaders informed and supported ECEC educators in this process.

1.6 Research design

Chapter Three of this thesis outlines the research design. This study was a qualitative, historical case study. The research examined how educators understood and enacted quality ECEfS and how pedagogical leadership was enacted in the ECEC centre to inform and support the educators’ embedding of EfS programs and practices as part of the NQS process. The case study context was a long day care ECEC setting. The study took data from interviews, the main data source, with the Director and the Educational (pedagogical) Leader as well as educators from the case study site. Supporting documents that related to the NQS assessment and rating process at the centre such as the quality improvement plan and the pedagogical leader’s reflective question responses were also collected. Photographs of the centre practices influenced by pedagogical leadership such as the progress of the ECEC learning environment and ECEfS carried out by children portrayed in centre’s social media page were gathered. These data were analysed using the six steps of thematic analysis identified by Braun and Clark (2007) and were interpreted using an interpretivist framework to explore and gain insights into the perceived understanding of participants (Rowlands, 2005). This led to findings that identified how educators understood and implemented quality ECEfS and how this was influenced by the pedagogical leadership team’s SPLE actions. Details of the research design are outlined in Chapter Three.
1.7 Summary of Chapter One

There is a small but growing interest and body of research in EfS and particularly ECEfS, along with interest in ECEC pedagogical leadership and quality in ECEC. This study sought to discover how quality ECEfS was understood and enacted in an ECEC centre as part of the NQS. The influence of the pedagogical leaders to inform and support this process was investigated. Pedagogical leadership and EfS were included in two of the seven Quality Areas in the 2012 NQS which prompted this study. This chapter was an introduction to this study outlining the context and background as well as the key drivers and themes for the research and the chapter also introduced the term SPLE.

Chapter Two is the literature review which examines three key topics. First ECEfS is investigated. Second, I have examined research related to the concept of quality in ECEC, with particular reference to the NQS. Third, contributing factors in the successful implementation of the NQS through SPLE that enacts high quality educational programs is explored. In Chapter Three, (Research Design) the structure of this qualitative, historical case study research is outlined. The context of the case study site details the physical and human environments. Ethical considerations and study limitations are acknowledged. Chapter Four outlines the data analysis and findings where evidence is presented to answer the research questions. The concluding Chapter Five includes implications of the study for theory, policy and practice including proposed recommendations for future research.
Chapter Two: Literature Review

The purpose of this literature review is to make the case for this study. To do this, the review examines three topics that support the rationale for this study. These are: early childhood education for sustainability (ECEfS), pedagogical leadership in ECEC, and quality in ECEC. These three topics are pertinent as this study sought to discover educators’ understandings of ECEfS and how their pedagogical leadership informed and supported them to embed quality ECEfS practices in a case study site.

Figure 1: Three topics of literature review

Figure 1 shows how these three topics are related and identifies the focus of the study at their intersection. First, this literature review focused on ECEfS and examined how it could be understood and enacted in ECEC. Literature addressing how pedagogical leadership informs and supports educators in quality ECEfS was then investigated. A search for the term and concept of
SPLE was conducted to ensure the authenticity of my claim of this term as an innovation in ECEC pedagogical leadership. The review concludes with a discussion of how quality ECEC is discussed in the literature and how this relates to ECEfS provision.

2.1 EARLY CHILDHOOD EDUCATION FOR SUSTAINABILITY

ECEfS is formed from the synthesis of EfS and ECEC (Davis, 2010b). This section includes the context and definition of ECEfS and EfS. It outlines Australian government initiatives in ECEfS, benefits of ECEfS for children, and examines what ECEfS might look like in practice. To understand the concept of ECEfS, first the term sustainability will be contextualised and defined.

2.1.1 Context and definition of sustainability

Sustainability is topical in Australian society as evidenced in media, both print and social, research and government legislation and initiatives. One aspect of sustainability, environmental sustainability, has been at the fore of this interest. The international Intergovernmental Panel on Climate Change (IPCC) 2014 report, like its previous reports, gained media attention stating that climate change is a major threat to sustainability. The IPCC concluded that climate change influences natural and human living conditions and therefore social and economic development. Conversely, society’s development priorities influence the greenhouse gas emissions that are causing climate change. Climate change is one result of unsustainable practices and so it serves to highlight what occurs when sustainability is not enacted. The years 2011 – 2020 were identified by the Australian Government’s Climate Commission as the “Critical Decade” (Hughes & McMichael, 2011) because “the global momentum achieved during this decade will set long-term foundations for tackling climate change effectively” (Climate Commission, 2012, p. 5). It is under such conditions that ECEC requirements to embed sustainability into centre practices occurred in the 2012 NQS, although it must be recognised that climate change is not the only driver; living sustainably necessitates changes and transition across a wide range of taken for granted social, economic and environmental practices (Climate Commission, 2012).

This international and local focus on environmental sustainability has influenced Australian legislation in ECEC. The 2012 National Quality Standard for Early Childhood Education and Care and School Age Care, provided imperatives to “drive early childhood education’s engagement with sustainability. In other words, sustainability in early childhood education is no longer optional, but essential” (Elliott, 2010, p. 34).
Discussions about sustainability are not new. The contemporary use of the term ‘sustainable development’ first occurred at the 1972 United Nations Meeting on the Human Environment in Sweden. This emerged out of a realisation that all people on earth should be able to live a good life whether from developed nations or not. How to achieve this without sacrificing the earth’s capacity to sustain life into the future was the key issue. Sustainability (i.e. a more sustainable world) is a long-term goal, while sustainable development is the many processes and pathways to achieve it (e.g., sustainable agriculture and forestry, sustainable production and consumption, good government, research and technology transfer, education and training, etc.) (UNESCO, 2012, p. 5).

The USA Environmental Protection Agency (EPA) website provides a definition of sustainability stating that “sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations” (EPA, 2015, n. p.). The concept of a healthy natural environment and positive societal and economic conditions continuing indefinitely resounds in other definitions found in this literature review. The most universally accepted definition of sustainability comes from the Brundtland Commission report of the United Nations which stated that sustainability “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p.16). The UNESCO definition expands the ‘healthy society’ concept by stating that sustainability “is a vision….that encompasses respect for all life - human and non-human - and natural resources, as well as integrating concerns such as poverty reduction, gender equality, human rights, education for all, health, human security and intercultural dialogue” (UNESCO, n.d., Paragraph 1). This definition has been widely adopted by successive Australian governments and influences how EfS plays out in schools and ECEC. The ultimate goal of sustainability is a community enjoying healthy ecosystems, social well-being and cohesion and a prosperous economy into the future. Elliott (2014) calls this “intergenerational equity” (p. 3). This is a broad view of sustainability rather than a focus on the natural environment alone.

The diagram below shows UNESCO’s holistic view where the natural environment fits into the bigger picture of sustainable development.
Various authors from a wide range of disciplines including ecology, sociology, politics, global studies, community development, health and education emphasise the interrelated economic, ecological and human/social dimensions of sustainable development (Kates, Parris & Leiserowitz, 2005; Munasinghe, 2003; Robinson & Herbert, 2001). The economic dimension aims to improve human welfare through prudent decisions in the use of financial resources. The natural environment dimension seeks to protect ecological systems, and the social/political dimensions focus on enriching human relationships and attaining individual and group aspirations (Munasinghe & Swart, 2000), as well as addressing concerns related to social justice and promotion of greater societal awareness of and engagement in environmental issues (O’Riordan, 2004). The interrelationship between these dimensions of sustainability is evident as each forms part of a whole. When these relationships are working well, the goals of sustainability, indicated in the outer circles of the diagram, will be reached in line with holistic definitions of sustainability mentioned above. Each part of the system relies on the other. Elliott and McCrea (2016) state that “a key tenet of systems theory is responsiveness; where every element and relationship within systems impacts on every other one” (p.30).

While sustainability is an aspirational idea, it is nevertheless gaining traction as a realisable goal for human development. Ecuador, for example, enshrined sustainability into its constitution in its ‘Rights for Nature’ article where rather than treating nature as property under the law, the constitution states that nature in all its life forms has the right to exist, persist, maintain and regenerate its vital cycles. It also states that people have the legal authority to enforce these rights on behalf of ecosystems (Greene, n. d.). Similarly, in a landmark preliminary agreement between the Crown government of New Zealand and the Whanganui River iwi (local indigenous people),
the Whanganui River was granted legal ‘personhood’ status in 2017. Elliott and McCrea (2016) agree with this notion stating that “sustainability is not just inclusive of humans but, all the living things that share the Earth’s resources” (p.30).

In contemporary ECEfS all aspects of sustainability, as defined above, can be included in ECEC programs rather than limiting learning to knowledge about and actions for the natural environment. Holistic ECEfS seeks to put sustainable environmental (natural), social, political and economic practices into place (Davis, 2010b).

**2.1.2 Definition of Education for Sustainability**

The themes of personal and social empowerment, action taking and lifelong learning resound in literature about EfS. The Australian Research Institute for Environment and Sustainability (ARIES, 2009) defines EfS as an internationally recognised educational approach that moves beyond educating about sustainability – to building people’s capacity for transformational change – educating for sustainability, thus focusing on motivating and engaging people to help create a better future. ARIES continues that EfS builds competence and provides a change strategy to assist people and organisations to take action regarding sustainability. This is illustrated by UNESCO (n.d.) when it stated that EfS “aims to help people to develop the attitudes, skills, perspectives and knowledge to make informed decisions and act upon them for the benefit of themselves and others, now and in the future (and it) helps the citizens of the world to learn their way to a more sustainable future” (n.p.).

EfS can be defined as continual transformational change through learning and taking action for sustainability in a holistic way encompassing environmental, political, economic, and social aspects so that options for future generations are not compromised (Davis, 2010b; Elliott, 2010). EfS is transdisciplinary, action-oriented and participatory, with learning that is applied and inquiry-based across curriculum areas being practical and inclusive (Davis, 2010b). This supports the previously discussed view that EfS has a broad, holistic skill base and lines of enquiry, presenting children as active change agents in their learning process.

EfS has come into focus in research, legislation and pedagogy over the last few decades. The following section explores government initiatives in regard to EfS.

**2.1.3 Australian government initiatives in Education for Sustainability**

In response to the beginning of a global EfS movement, the Australian government has reacted by developing relevant policy and legislation. This section outlines some of these initiatives.
In the local context, *Living Sustainably*, the 2009 Australian Government's National Action Plan for Education for Sustainability (DEWHA, 2009), outlined seven key principles of EfS. These principles are explained briefly as follows.

- *Transformation and change* are the skills, capacity and motivation to change towards sustainability.
- *Education for all* and *lifelong learning* show that educators, children and families can be included in the continual process of lifelong learning.
- *Systems thinking* involves a connection and interrelatedness between the environmental, economic, social and political dimensions of sustainability.
- *Envisioning a better future* comprises developing a shared vision for a sustainable future.
- *Critical thinking and reflection* challenges personal experiences and world views.
- *Participation* means that personal engagement in EfS is necessary.
- *Partnerships for change* include networks, relationships and communication between participants in EfS.

These principles illustrate the integrated view of EfS that includes social, economic, political and natural dimensions and that children – indeed all learners – should be empowered to make changes for sustainability.

In Australia, the view that EfS must start early is reflected in documents relating to school aged children, such as the Australian Government Sustainability Curriculum Framework (DEWHA, 2010) where EfS is about learning, designing and implementing knowledge that will have an impact on the future in terms of environmental integrity, economic viability, and a just society for present and future generations. The document states that children are to be empowered to act themselves or in groups to explore, evaluate and create solutions for a sustainable future.

### 2.1.4 Education for Sustainability in Early Childhood Education and Care

This research has a specific focus on EfS in the ECEC context. The unique characteristics of ECEfS are now explained.

In 1977 the first intergovernmental conference on Environmental Education (UNESCO) urged governments to include environmental education in the curriculum. Ratification of the
United Nations Convention on the Rights of the Child by Australia in 1990 meant a commitment to children’s rights to grow up in a healthy and safe world. This commitment helped kick-start awareness of the need for environmental education in the Australian ECEC field.

In the 1990s, peak organisations such as the Queensland Early Childhood Environmental Education Network (QECEEN) and researchers in Australia writing about ECEfS such as Davis and Elliott emerged. International uptake of EfS in ECEC was initially slow being limited to a small body of research (Davis, 2014) and within early childhood education networks in only a small number of Nordic and Asian countries Australia, New Zealand and the United Kingdom. During this period federal and state-based professional networks were established across Australia supported by organisations such as Early Childhood Australia.

The UNESCO Decade for Education for Sustainable Development 2005 – 2014 drew further world attention to ECEfS. In a 2007 meeting supported by UNESCO in Sweden, the Gothenburg report entitled “The Contribution of Early Education to a Sustainable Society”, included specific early childhood recommendations noting that “childhood is the logical starting point for education for sustainable development” (p.4). However, in a literature review spanning 1996 to 2007, Davis (2009) found that “almost no research articles described young children as taking action for the environment, thus failing to reflect current images of young children as capable and competent participants in the world and as change agents for sustainability” (p.4). Elliott and McCrea (2016) state that

recent literature (Dickinsen, 2013; Elliott and Young, 2015; Taylor, 2013) is now questioning how romanticised notions of children in nature may be thwarting more challenging and deliberative pedagogical discussions among educators about links between children being in natural environments and also living sustainably. ECEfS must incorporate all four dimensions of sustainability, not just the environmental/nature dimension (p. 22).

This view suggests that children are not being given the opportunity to fully explore sustainability.

While the uptake of EfS in ECEC during the Decade for Education for Sustainable Development was initially sluggish, since 2010 research in this field has been growing, although significant gaps still exist (Davis and Elliott, 2014). As indicated earlier, this study addresses gaps identified in the literature review around the three topics; ECEfS, pedagogical leadership in ECEC and quality ECEC. Awareness of these gaps led to the researcher exploring the understanding and enactment of ECEfS and the SPLE informing and supporting educators implementing quality in ECEC.
Australian ECEfS research, along with research from just a few European (mostly Nordic) and Asian (Japan and Korea) countries, has lead the way more recently, resulting in advocacy for “an embedded and enacted culture of education for sustainability with early childhood education, rather than focusing mainly on investigating children’s knowledge about the environment or their engagement in the environment (emphases added)” (Davis and Elliott, 2014, p.5).

In terms of ECEC, most researchers comment that EFS can go well beyond the common practice of simply planting vegetable gardens and observing the weather with children. EFS has much broader implications and effects for ECEC educators and children now and into the future. Young children can learn, for example, that the vegetable patch is part of larger processes that can encompass the social, economic, political and natural dimensions of sustainability. Children can be involved in or even lead the planting, nurturing and harvesting of food and seeds for future use, cooking, eating together, in some cases selling the vegetables to families or composting including worm castings and ‘juice’ that can also be sold to buy more resources such as seeds. The seeds can then be sown perhaps in recycled egg cartons ready for the cycle to continue (Elliott & McCrea, 2016). Actions by children, educators, families and the community can occur at each stage of this cycle. Opportunities for higher order thinking (based on Bloom, Englehart, Furst, Hill & Krathwohl, 1956) are available throughout each step in this process.

ECEfS, then, can be described as a transformative, empowering and participative approach to ECEC. It includes engagement with sustainability issues, topics and experiences and is about enriching such experiences and building on young children’s knowledge, dispositions and skills to ‘make a difference’ now and for the future (adapted from Davis, 2010b). Current interest in and advocating for ECEfS influenced Australian ECEC quality legislation such as the 2012 NQS and the national curriculum framework, the EYLF.

2.1.5 Early Childhood Education and Care legislation and Early Childhood Education for Sustainability

In Australia, research, practical initiatives and legislation have culminated in the key curriculum documents used by ECEC educators today. The following table shows some of the main principles, practices and outcomes of these sources as they relate to EfS.
<table>
<thead>
<tr>
<th><strong>DET Sustainability principles</strong></th>
<th><strong>NQF Principles</strong></th>
<th><strong>NQS Quality Areas</strong></th>
<th><strong>EYLF Principles</strong></th>
<th><strong>EYLF Practices</strong></th>
<th><strong>EYLF outcomes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformation and change</td>
<td>Children are successful, competent and capable learners</td>
<td>Education program and practice</td>
<td>High expectations and equity</td>
<td>Holistic approaches Continuity of learning and transitions</td>
<td>Children are confident and involved learners</td>
</tr>
<tr>
<td>Education for all and lifelong learning</td>
<td>Equity, inclusion and diversity underpin the framework</td>
<td>Children’s Health and Safety</td>
<td>Ongoing learning and reflective practice</td>
<td>Responsiveness to children</td>
<td>Children are connected with and contribute to their world</td>
</tr>
<tr>
<td>Systems thinking</td>
<td>Best practice is expected in the provision of education and care centres.</td>
<td>Physical environment</td>
<td>Secure, respectful, reciprocal relationships</td>
<td></td>
<td>Children have a strong sense of wellbeing</td>
</tr>
<tr>
<td>Envisioning a better future</td>
<td>Equity, inclusion and diversity underpin the framework. The rights and best interests of the child are paramount</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical thinking and reflection</td>
<td>Intentional teaching Assessment for learning</td>
<td></td>
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<tr>
<td>Participation</td>
<td>Learning through play</td>
<td>Learning environments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnerships for change</td>
<td>Australia’s Aboriginal and Torres Strait Islander cultures are valued</td>
<td>Collaborative partnerships with families and communities</td>
<td>Partnerships</td>
<td>Cultural competence</td>
<td>Children are effective communicators</td>
</tr>
<tr>
<td></td>
<td>The role of parents and families is respected and supported</td>
<td>Staffing arrangements Relationships with children Leadership and Management</td>
<td></td>
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</tr>
</tbody>
</table>

Table 2 Principles, practices and outcomes across ECEC and EfS documents

Table 2 illuminates how common themes are expressed in Australian early childhood curriculum and policy documents.

- **Children as empowered, competent and capable agents of change** is one common theme expressed across these documents. Educators are confident in children’s capabilities to engage in co-construction of learning in ECEfS as well as at times leading this learning. Children are not passive in this learning process so participation is a major component of ECEfS.

- **Social justice** principles apply in ECEfS as the inclusion of diverse topics, views and participants is evident. The rights of children are upheld and respected and cultural aspects of their lives are honoured.

- ECEfS is not bound to one ‘subject area’ in the curriculum and all four sustainability dimensions are evident across principles, practices and outcomes for children. The notion of no beginning or end to learning is seen in the ethos of *lifelong learning* for now and the future. Learning is *holistic* in that it touches all areas of a child’s development.

- **Critically reflective practice** involves educators and children as they view issues and learning from different perspectives. This occurs before and during learning taking place and can be used for assessment of children’s learning which informs future directions.

- **The educator/child relationship** is recognised as fundamental to quality ECEC throughout the documents. This includes different ways of interacting such as teacher-led in the case of intentional teaching, co-construction where educators and children work alongside each other learning as they go and at times child-led where children become change agents and active citizens. All of this occurs in a play based learning environment. This relationship sets the scene for other important relationships such as educator/families and centre/community relationships. Each is respectful, collaborative and reciprocal.

- **Systems and management support** the ideals of ECEfS by providing the organisation, leadership, adherence to governance, time, space and resources to personnel of the centre as well as children and their families to engage in and understand the relationship between the four dimensions of sustainability.
The legislation, curricular and other requirements outlined in the table above link and support each other to effect better learning outcomes for children. When applied specifically to ECEfS, benefits for children ensue and these are explored below.

2.1.6 Benefits of ECEfS for children

As well as providing opportunities for optimal mental and physical health, ECEfS has significant positive effects on the quality of children’s future lives. Much current research in ECEfS focuses on the link between early learning and immersion in nature (Kellert, 2005; Louv, 2005; Taylor & Kuo, 2011). Findings suggest that mental and physical health is compromised when there is a lack of relationship with nature. Regardless of race, ethnicity and socioeconomic status, research has shown that early childhood experiences in nature significantly influence the development of lifelong environmental attitudes and values (Chawla, 2006; Wells, 2000). Wells and Lekies (2006), state that there is a connection between early nature experiences and later positive adult attitudes to the environment, adding weight to the argument that the earlier environmental education occurs, the greater impact it will have on the children now into the future. As noted previously, lifelong learning is a principle of EfS.

Opportunities to make and sustain respectful and reciprocal relationships between children and educators as well as families and the wider community are provided in ECEC programs. Social sustainability aspects of the ECEC program require an “ethos of compassion, respect for difference, equality and fairness” (Chan, 2006). Universal access (Australian Government Department of Education and Training website, n.d.) for children and inclusive policies (Owens, 2012) contribute to children’s experiences and relationships. Social sustainability values healthy and inclusive social relationships.

This section has shown that early learning in the area of EfS has current and future benefits for children mentally, physically and socially. The next section explores EfS in practice in ECEC centres.

2.1.7 Early Childhood Education for Sustainability in practice

ECEfS may take many forms while adhering to the sustainability principles (DET, 2009) (Table 2). Here educators recognise the appropriateness and relevance of a mostly localised approach to ECEfS between children, their families, educators and the wider community but facilitate awareness of global issues if appropriate to children’s current interests (Robinson and Vaenaliki, 2010).
ECEfS can be seen as an interrelationship between pedagogy i.e. curriculum, teaching and learning; people i.e. partnerships and community; and place i.e. environment and ethos, as illustrated in the following diagram in Cooke (2010, p. 254) adapted from Young and Williams’ (1989) model of a health promoting school. This model illustrates how the links between health promoting schools and sustainable education settings are quite apparent (Davis and Cooke, 2007) and has relevance for this research as explained below.

The interplay of these three components should also support sustainable ECEC, and will be used as a framework for exploring the pedagogical leadership strategies at this study’s research site. Curriculum and teaching and learning (pedagogy) includes children and educators actively involved in sustainability learning and actions; the environment and ethos includes the physical and social environments where children learn from and interact in nature and where democratic, inclusive learning, teaching and management approaches to addressing sustainability issues occur; and, partnerships and community include the ongoing reciprocal relationships between children, educators, families and the wider community as they strive to become more sustainable. All three components work together in interrelated ways so that effective ECEfS can occur. For example, a centre should not only engage children in ECEfS learning experiences, it should also look at its own management practices such as how it uses office resources, and supporting staff in their professional learning, as well as considering how it engages families in ECEfS. The case study site demonstrated these kinds of interrelated sustainability practices, as outlined in Chapter Four.

When ECEC pedagogical leaders oversee quality EfS pedagogical practices, they weigh the value of their ideas to democratically decide on a course of action (ARIES, n.d). This notion is supported by the European Panel on Sustainable Development (2010) which poses the questions: Are the ideas for practice bearable (endured or tolerated), equitable (fair and just)
and viable (capable of continuing effectiveness)? and How are they related to social, economic and environmental issues? Consideration of these questions may ensure ECEfS is addressed holistically and provides the best learning journey for children, educators, families and community. These questions underpinned this researcher’s thinking as she conducted this historical case study at Green Leaf ELC.

The importance of ECEC educators in informing children’s attitudes and perceptions about sustainable learning and practices is recognised by Siraj-Blatchford (2009) when she comments that young children learn from adults’ actions and so it is adults’ daily practices that have the most influence on them. When educators naturally embed sustainable practices throughout all aspects of their pedagogy in an authentic way children are encouraged to engage in direct experiences and higher order thinking; and multifaceted and complex learning takes place. Evans, Whitehouse and Hickey (2012) in their study about pre-service teachers’ conceptions of ECEfS, found that students in the final stages of their degree study had a broader understanding of ECEfS learning than beginning students. They found more experienced students believed that ECEfS is best developed through interdisciplinary, inquiry and critical approaches to education. One of the findings of the research outlined in this thesis was that more qualified educators had a broader understanding of ECEfS. In the case of ECEfS, educators and children learn together, carrying out sustainable actions in all that they do and creatively solve problems along the way.

There have been few peer-reviewed research studies showing the process and effect of EfS in an ECEC centre (Elliott, Edwards, Davis and Cutter-Mackenzie, 2013). However, the following five examples of ECEfS in action show how this can unfold in different ways and offer examples of what can be achieved.

2.1.8 Case studies of ECEfS practice

The first case study of ECEfS in practice is a collaborative research project by Davis, Rowntree, Gibson, Pratt and Eglington (2005) with Campus Kindergarten staff, families and staff in the decade-long Sustainable Planet Project (1996 – 2006). One action included steps to remove a dumped shopping trolley from the university grounds. This project was an example of a local environmental sustainability project where educators listened to children’s concerns about the shopping trolley, facilitated communication with the shopping centre to organise its return and produced signage to discourage removal of trolleys from the shopping centre. This action-oriented project included educators and children working together to solve a problem.
A second study in ECEfS was undertaken by Stuhmcke (2012) who employed a project approach to expand children’s participation in EfS. In an ECEC centre that already included many environmental sustainability processes, children were engaged in action research through the Rainforest Project. This was initiated from a child’s discussion and collage representation of a rainforest scene. Stuhmcke concluded that engaging with children in learning and action-taking enabled children to participate in their own future thus becoming motivated and engaged. In this approach, the children became empowered leaders, educators and intergenerational change agents through their production of a class book and the influence they had on sustainable home practices. This transformational project is an example of how an ECEC centre and the children’s families can work together to solve problems in the natural environment.

In the third study, Ji (2014) demonstrated a South Korean example of EfS in the Musim Stream Project. In this project children set about advocating for urban otters’ survival by going on an excursion to look for evidence that otters were in the stream. When this evidence was found, the children wrote to local authorities about their plight, created posters and songs about the issue and held a community day to raise awareness. This is an example of how EfS can involve the local community and how children are capable change agents.

While not a peer-reviewed research study, the fourth example, The Giving Tree project, was conducted through the Early Years Education for Sustainability organisation (Sherbrooke Family and Children’s Centre, n.d.). Second-hand gifts for less privileged children were donated by children at an ECEC centre and gathered under a tree at Christmas time. They sourced a local community organisation that took the toys and distributed them to local schools. This is an example of environmental (not contributing to land waste), social (children experiencing giving and receiving with others) and economic (re-using rather than purchasing new toys) sustainability.

The fifth example shows that a global perspective of sustainability may occur through children’s engagement in learning about climate change. Gilbert, Rose, Palmer and Fuller (2013) conducted research of early childhood education degree educators in Sweden. One of the themes explored was children’s engagement. Children and educators were interested in the effects of cold weather on their garden. As a stimulus, a book about climate change and the effect on animals was read with the children. A child commented that to turn off the power would save polar bears. This indicated the beginning of understanding about the importance of global interrelationships between land, people and animals. The findings of the study suggest evidence
of the child’s thinking and demonstrated an ability to transfer personal knowledge into community practice.

The above examples show that ECEfS can be both small and large scale, and address local and global issues and topics. Each example had meaning for the children involved as they explored EfS possibilities with their early childhood educators. These examples reflect an emphasis on transformative approaches (Stuhmcke, 2012) that address locally determined sustainability challenges that support children’s action-taking to complement problem identification and problem solving. Davis and Elliott (2012) share the view that children are competent, active agents in their own lives. They are affected by, and capable of, engaging with complex environmental and social issues. This steers away from romanticized notions of childhood as an arena of innocent play that positions all children as leading exclusively sheltered, safe and happy lives untouched by events around them (p. 1).

2.1.9 Summary of ECEfS

ECEfS has evolved through a growing base of research to formulate principles which are reflected in initiatives and legislation used in ECEC. Benefits of ECEfS for learning as well as mental and physical wellbeing in children are emerging in such research.

ECEfS is a holistic approach to learning together that leads educators and children to higher order thinking through authentic actions. Children in ECEfS play a central role in their own learning which can include local, community and global perspectives.

ECEfS is not simply about learning to care for the natural environment. Equally important components underpinning the broad definition of sustainability are social, political and economic dimensions. In all of these areas, early childhood educators can ask themselves if their practices are bearable, equitable, viable and therefore sustainable. There is scant acknowledgement of this broader definition of sustainability in the ECEC sector and this study sought to address this deficit. Evidence of all four dimensions of sustainability was sought and examined when researching the ECEfS pedagogical practices at the case study site as outlined in Chapter Four. This examination and analysis has led to the adoption, in this thesis of the key term SPLE.

This section explored the first topic of the literature review, that is, ECEfS. As the study focused on leadership in embedding ECEfS, the following section examines how leadership is presented in the literature, with a particular focus on pedagogical leadership in early childhood education.
2.2 PEDAGOGICAL LEADERSHIP IN ECEC

This section examines pedagogical leadership and how it is enacted and influences quality outcomes for children in ECEC. Definitions and theories about ECEC leadership, emphasising pedagogical leadership, are explored and challenges to a universal description of leadership in ECEC are noted. The literature examines pedagogical leadership in general, in formal schooling, but also has a specific focus on ECEC. Different types and attributes of effective leadership for the ECEC sector are explained. The context and theoretical influences on leadership outlined in this section set the stage for understanding recent Australian legislative requirements for pedagogical leaders within ECEC and the relationship between leadership and quality ECEC. Links to leadership in EfS in an ECEC centre are demonstrated and challenges and possible future directions for SPLE are suggested.

First, a definition of leadership is explored. Broad leadership discussion is included where appropriate; however leadership within the ECEC sector was the deliberate focus due to its unique characteristics and relevance for this study.

2.2.1 Leadership in Early Childhood Education and Care

Several authors present the same argument that leadership in ECEC is difficult to define as it varies according to context (Hard, 2005; Lewis & Hill, 2012; Heikka & Hujala, 2013; Rodd, 2013). Lewis and Hill, national and international leadership, management and quality improvement consultants, state that “leadership is complex, dynamic and varies between centres and cultures” (2012, paragraph 10). There are, however, some common leadership features identified in the literature. These are examined below, after which a definition is put forward for the purpose of this study.

ECEC leadership features identified are, that it:

- is difficult to define (Campbell-Evans, Stamopoulos & Maloney, 2014; Hard, 2005; Hujala, et. al., 2013; Lewis & Hill, 2012);
- involves guiding others towards a shared vision (Bennis & Bennis, 2010; Rodd, 2013; Siraj-Blatchford & Manni, 2007);
- may be non-positional in the centre (Ciulla,1998; Lewis & Hill, 2012; Waniganayake & Semann, 2011);
- involves ethical practices (Lewis & Hill, 2012; Rodd, 2006; Siraj-Blatchford & Manni, 2006);
can be learned (Lewis & Hill, 2012; Rodd, 2012); and it has benefits for leaders (Rodd, 2006, 2012; Sergiovanni, 1998) as well as other educators. Each of these ideas is now expanded.

**Leadership is difficult to define**

Leadership is difficult to identify, quantify or observe. Early Childhood Australia, Australia’s peak advocacy body for ECEC, produced a Leadership Capability Framework for Early Childhood Education and Care and School Age Care, citing the situational influence on leadership when they state “there is not just one way to enact leadership—it is complex, dynamic and varies from situation to situation and from culture to culture” (Lewis & Hill, 2012, p.11). Campbell-Evans et. al. (2014) and Hard (2005) note that leaders need to evolve and adjust their practice and respond to changing ECEC contexts and policies. Therefore, leadership in the ECEC context is situationally based and dynamic in response to needs that arise. As outlined in Chapter Four, the leadership practices illustrated in the case study site reflected leadership that responded to the evolving situation and culture of the centre.

**Leadership guiding others toward vision**

Leaders have vision and influence others and their actions. The theme of vision and motivating others to follow that vision is recurring in the educational leadership literature. Vision can be described as “an idea or concept about the future” (Rodd, 2015, p. 88). Siraj-Blatchford and Manni (2007), in the Effective Leadership in the Early Years (ELEYS) study, found that “in the most effective settings better leadership was characterised by a clear vision, especially with regard to pedagogy and curriculum” (p. 13). The leader’s vision needs to be known and articulated so that all stakeholders are aware of and may have the opportunity to contribute to the goals for the centre (Rodd, 2012). It is not just a matter of knowing the vision but, put simply by Bennis (1989), “leadership is the capacity to translate vision into reality” (p. 143). This case study looked at the leadership vision and influence on other educators within a particular ECEC setting where EfS was being implemented for the first time.

**Leadership may be non-positional**

Leadership may not only be enacted by a person at the top of a hierarchy. Leadership can be shared among centre staff and may not be linked to a particular position and it may not even exist comprehensively in the nominated leader of a centre (Rodd, 2013). Waniganayake and Semann (2011), specifically referring to ECEC, state that leadership is “a journey of joint inquiry, exploration and reflection that can involve everyone who believes in making a difference
for children” (p.24). Early Childhood Educators of British Columbia’s (ECEBC) (2007) refers to a model for leadership that is consistent with the ‘ECE way’ being collaborative, non-hierarchical and action-oriented; where all are potential leaders who can act within or outside their centres and are confident to make changes. This egalitarian approach fits comfortably with ECEC educators as the usual work practice is team-oriented (ECEBC, 2007). It should be noted, that in contrast, Hard’s (2006) thesis disputes this assumption of harmony and equality citing the “discourse of niceness juxtaposed against examples of horizontal violence” (p. 3) occurring in ECEC centres. She continues that the desire for harmony in ECEC may inhibit dialogue and debate and promote conformity and compliance rather than aspirations for leadership. Horizontal violence is “overt and covert non-physical hostility, such as criticism, sabotage, undermining, infighting, scapegoating and bickering” (Duffy, 1995, p. 16). However, in centres with a positive organisational culture (ACECQA, 2013), including respect and confidence, there exists the opportunity for all ECEC educators to take on roles of leadership within a centre both at a specialised and whole-of-centre level. Discussion in Chapter Four demonstrates how, in this case study, the leadership characteristics of all educators at the ECEC centre were supported as they sought to embed new ECEfS pedagogical practices.

**Ethical leadership practices**

In ECEC, leadership is the ability to act respectfully and ethically when leading others towards the vision and goals of the centre. Cuilla (1998), an ethical leadership author, stated that "leadership is not a person or a position. It is a complex moral relationship between people, based on trust, obligation, commitment, emotion, and a shared vision of the good" (p. xv). Lewis and Hill (2012) state that effective ECEC leaders are respectful and ethical in their practices at all levels within a centre and through their guidance and direction teams build a collective ethical responsibility to the centre. The result of ethical leadership is that educators respect the work of the leader and in turn work ethically themselves (Rodd, 2006). Rodd continues that leadership in ECEC is a moral act where values and principles about what is right and wrong are used to lead in the best interests of individuals and groups. Siraj-Blatchford and Manni (2006) propose that effective ECEC leaders are reflective practitioners who set an example by providing a moral model. In the *Early Childhood Australia* (2016) *Code of Ethics* ethical responsibilities to children, families, colleagues, communities, students, educators as professionals and research are detailed. This code provides a framework for reflection about the ethical responsibilities of ECEC professionals by setting out the Core Principles such that children have unique characteristics and rights; that educators make informed decisions about teaching curriculum;
educators share responsibility for children’s learning with families and community and these relationships are central to children’s learning; democratic and equitable practices are promoted; relationships are central to children’s education and care; and that play and leisure are essential for learning and wellbeing. These principles align with ECEfS principles (Table 1) and were found at the case study site.

**Leadership skills can be learned**

Effective leadership skills in ECEC can be learned. This is in contrast to the beliefs of leadership trait theory which proposes that leaders are born with innate traits (further information on leadership trait theory is found in section 2.2.6). Lewis and Hill (2012) have concluded after the completion of extensive research and national consultations that leadership starts from within the leader. However, rather than a leader having a set of inborn traits, it is a process of personal and professional learning over time that is relevant. They identify that others viewing this process of leadership learning are more likely to respect the leader as they have seen the leader develop deeper knowledge and experience over time. Good leaders realise their own need for professional learning which, in turn, helps to raise the quality of the centre (Rodd, 2012). Rodd adds that competent leaders can then pass their knowledge on to other educators. This case study presented in this thesis revealed the professional learning on the topic of ECEfS that took place at the centre and how this was utilised and disseminated to others. The concepts of lifelong learning and continuous improvement generated by leaders striving to develop professionally, sits well with NQS and EfS principles (DET, 2009) outlined previously in Table 2.

**Leadership benefits the leader**

Leadership roles provide benefits for leaders within an ECEC centre as well as those they lead. Sergiovanni (1998) describes the benefit for leaders as intellectual and professional capital. Rodd (2006) supports this notion of personal capacity building when she says that ECEC leaders “embrace a life-long learning perspective towards their own development and regard leadership as a key aspect of this development” (p. 250). Rodd continues that leaders must first inspire themselves before they can inspire others and that leaders have a strong commitment to life-long learning that can infuse those around them with the same passion. Benefits of personal and professional learning for leaders are often overlooked when discussing leadership in ECEC centres where the natural emphasis is on the high needs of children, families, colleagues and even the wider community (Henderson-Kelly and Pamphilon, 2000). Henderson-Kelly and Pamphilon (2000) argue the need for further research and dialogue in order to determine what
support underpins effective leadership in this family-focused, female dominated, and often under-resourced field. This study helped address this need.

The above concepts about ECEC leadership gained from the literature closely align with the Early Childhood Australia (2012a) Leadership Capability Framework for Early Childhood Education and Care and School Age Care which state that

- Leadership is about identity—it starts from within.
- Leadership is about influence (both directly and indirectly) and responsibility, and is therefore potentially open to everyone.
- Leadership demonstrates respect as an enactment of ethical commitments.
- Leadership is about qualities and values rather than position.
- There is not just one way to enact leadership—it is complex, dynamic and varies from situation to situation and from culture to culture.
- Leadership is about purpose.
- Leadership capabilities can be professionally developed.

Consideration of the above viewpoints derived from the literature on leadership led to a definition of leadership that was then used to guide this study. For the purposes of this study, pedagogical leadership in an ECEC centre is defined by this researcher as the act of ethically guiding and collaborating with educators towards the shared vision of the ECEC centre through a process of continuous quality improvement. This was a measure that was used throughout the study to guide data collection and analysis.

To summarise, pedagogical leadership includes qualities of respect and ethical practice as well as a love of lifelong learning and the ability to enthuse others to take this learning journey. Leadership may not be tied to a particular employment position within a centre and is unique to centre needs. Benefits occur for the leader, those they lead, and ultimately for the children and families enrolled in the centre as well as to the broader community. This leadership model also fits well with the NQS and EfS principles (DET, 2009) outlined in Table 2.

2.2.2 Context for leadership in Early Childhood Education and Care

As noted earlier, leadership, as a topic of interest, has been gaining momentum in the ECEC field for the last century and a half in Australia, resulting in the leadership status described in the 2012 NQS that a “suitably qualified and experienced educator or coordinator should lead the development of the curriculum and ensure the establishment of clear goals and expectations for teaching and learning” (ACECQA, 2013, p. 172).
Many ECEC educators may not have considered themselves leaders within their profession even though they carry out leadership duties (O’Gorman and Hard, 2013). Some authors talk about leaders within ECEC as accidental or reluctant leaders who are appointed to management positions by being the most highly qualified person or by their years of service regardless of their leadership attributes, experience and capacity to lead (Ebbeck & Waniganayake, 2004; Heikka, Waniganayake & Hujala, 2013). Caldwell (2003), Solly (2003) and Hard (2005) suggest one reason for this could be the lack of status of educators within ECEC, being less visible and valued than, for example, school teachers. This may impact educators’ views of themselves as potential leaders (Early Childhood Educators British Columbia, 2007). Traditional perceptions of leadership are that it is positional, hierarchical and historically male dominated (Hard, 2005), however, these models may not adequately represent the highly feminised context of the ECEC field. In this study, newer models of leadership have emerged that appear to be a better fit with the style and practices of the study participants. As this study had a particular focus on leadership in EFS, opportunities for educators and children to take on leadership roles resulted in new ways of leading framed around sustainability principles leading to the term coined by the researcher of SPLE.

Requirements continue to be more formalised and regulated in ECEC and so arises the need to develop skills in leading organisational change in Australian ECEC settings (Andrews, 2009). As stated previously, the 2012 NQS required provision of a suitably qualified and experienced educator to lead the development of the curriculum and to establish goals and expectations for teaching and learning. The Australian Government’s Early Childhood Education and Care Workforce Strategy for Australia (SCSEEC) (Australian Government, 2012) suggested increased participation by the sector in professional development and leadership activities, with a focus on professional educational practice, program design and delivery and leadership. Personal communication during an action research project conducted by this researcher in 2013 and 2014 with Directors and Educational Leaders from ECEC centres within the case study site region showed how pedagogical leadership was being demonstrated. Often, centre Directors took on this role and were nominated Education Leader of the centre, but in time, while some Directors retained the title, for others the position was delegated to senior educators. It was noted in this personal communication that the dual role of Director and pedagogical leader was proving a difficult balance for many Directors; they saw separation of the role a better choice. Some implemented this by allocating specific time to carry out each role during the week themselves, while others chose to share the role with another educator.
Regardless of these teething problems, through the legislated Educational Leader position, the previous action research found that there was impetus such that many early childhood educators began to feel empowered to recognise and articulate their leadership practices within the centre and in the wider community. According to Thomas and Nuttall (2014) pedagogical leaders are beginning to develop leadership practices while building on their experience as managers, responding to policy imperatives, and staying true to the relational emphasis of work in ECEC centres.

While the literature shows that new leadership opportunities are emerging in ECEC, there are also challenges for the ECEC field, broadly, as well as for working specifically in the area of EfS. Challenges for leaders are outlined in the next section of this review.

### 2.2.3 Leadership challenges for Early Childhood Education and Care

The ECEC field faces particular challenges in the enactment of leadership in a time of change in Australia. Fasoli, Scrivens and Woodrow (2007) recognised these challenges and suggested that strong leadership was required to guide ECEC teams toward successful outcomes for young children and their families. The introduction of the Educational Leader role in 2012 in ECEC centres prompted the challenge of implementing new aspects of leadership. Such challenges included managing fast paced, complex change and organisational support (Semann & Soper, 2012), the lack of role models in the field (Hard, 2005) and isolated and poorly compensated leaders (Hard & O’Gorman, 2007). These topics are explored in more detail below.

As part of this research study, time allocation for, and how time was used by the leaders was investigated. Semann and Soper (2012), education and leadership consultants, state that effective leadership in ECEC requires both time away from everyday practice, and the ability to work alongside the educators to lead and support them. They state that the inevitable challenge for ECEC is the time required for the pedagogical leader to effectively take up this role.

Whilst there have been some ECEC leadership role models throughout Australia’s history there has been a paucity of such individuals (Hard, 2005). Hard (2005) stated that it is more likely that organisations, rather than individuals, are held in high esteem and seen as leaders in the ECEC field by educators. ECEC organisations include Early Childhood Australia (ECA) and Australian Children’s Education and Care Quality Authority (ACECQA). Since early 2014, the lack of individual leadership role models has been addressed with the appointment of a National Education Leader for ECEC through ACECQA.
Another challenge for pedagogical leaders in ECEC is separation and isolation because many centres are separately located and they may have very little professional or social interaction with other centres. In the case of centres that are part of a chain of centres or those that are located within a school, as was the case in this study, this may not be the case as separation and isolation may be reduced. Hard and O’Gorman (2007) note that separation and isolation has contributed to leaders not being recognised within or outside centres. The inclusion of the Educational Leader role in ECEC may have a positive effect on improving the status of educators within themselves, their centres and as a result in the outer community. This may only occur fully when educators achieve parity with other sectors of the education field in relation to remuneration (Hard, 2005). As outlined in Chapter Four of this thesis, the leadership participants in his case study showed that the introduction of an Educational Leader led to leadership participation in the centre and community.

A further challenge is that professional learning opportunities in leading other educators are often minimal, although, this is being addressed somewhat with increasing emphasis in tertiary vocational and university courses that, until recently, have not focused on this area of learning (Rodd, 2013). Rodd continues that present course content involving leadership is typically an add-on in the last semester rather than embedded throughout the course. The participants in this study discussed the initial leadership training they received and how they came to be in leadership positions within the centre as well as any ongoing training in which they had participated.

The next section discusses pedagogical leadership in ECEC. Definitions are explored along with tasks, theories and attributes of pedagogical leadership.

2.2.4 Pedagogical Leadership in ECEC

In order to understand pedagogical leadership, definitions of pedagogy were filtered from the literature. For the purposes of this study, pedagogy is defined as the techniques, strategies and relationships that enable learning to take place. In ECEC, pedagogy is evolving and largely individualised according to external factors as well as the unique characteristics of the participants and setting of the centre (Moss, 2006; OECD, 2006).

Drawing on general literature about pedagogy, Gage (1994), an American educational psychologist, defined pedagogy as the art and science of teaching, thus portraying notions of creativity as well as the building and organisation of knowledge. Mortimore (1999), hailing from the formal schooling sector in the UK however, considered the words art and science as too
limiting and that pedagogy should include any conscious activity designed to enhance learning in another. Siraj-Blatchford and Manni’s (2007) Effective Leadership in the Early Years study in the UK, saw pedagogy as instructional techniques and strategies that provide opportunities for acquisition of knowledge, skills, attitudes and dispositions. Furthermore, they continued that pedagogy can be seen as the how, what and why of the teaching process including how the teaching occurs according to the particular setting, the approach that the educators take to teaching and learning, the way the content is delivered and what the children learn as a result of the process.

Relationships between educators and families are critical to the success of pedagogy in early childhood contexts (Heikka & Waniganayake, 2011; MacNeill & Silcox, 2003; Mortimore, 1999). This is underscored in the national Early Years Learning Framework (DEEWR, 2009) where pedagogy is described as “early childhood educators’ professional practice, especially those aspects that involve building and nurturing relationships, curriculum decision-making, teaching and learning” (p.9). Heikka and Waniganayake (2011) also note that the value of relationships usually refers to the quality of relationships between children, parents and teachers. They state that ECEC settings are unique in the complex and intimate relationships that are forged through the daily interactions in the highly emotive practice of educating and caring for very young children so relationships are inextricably part of all centre aspects. These close relationships have a place in EfS as children, their families and educators work alongside one another in collaborative learning, a key aspect of EfS.

Pedagogy, therefore, can be defined as the practices, the techniques and strategies that enable learning to take place as well as the relationships that are forged by educators both within and outside the centre. How pedagogy evolves is unique depending on the demands of the individual centre. Pedagogy, like leadership, will proceed differently in individual centres and is shaped by external and internal factors. Within ECEC, pedagogy is influenced by national and local policies and guidelines, community expectations, as well as the needs, interests and abilities of individual children and their families.

A definition of pedagogy has been explored above including the importance of relationships to its successful implementation. The following section combines the notions of pedagogy and leadership into the term pedagogical leadership which is the specific focus of this study.
2.2.5 Definition of pedagogical leadership

In an attempt to define leadership in ECEC, Heikka and Waniganayake (2011) categorised ECEC leadership into “a framework of five areas of leadership: administration, pedagogy, advocacy, community and conceptual leadership” (p. 505). This demonstrates that there is a difference between pedagogical leadership and traditional organisational leadership. The latter usually involves such tasks as budgeting and rosters. However, within small early childhood settings, one person may be responsible for both pedagogical and organisational functions. In this study pedagogical leadership was the focus.

Definitions of pedagogical leadership in ECEC are difficult to crystallise because centres and educators differ widely. The key authors of the EYLF, Sumsion, Barnes, Cheeseman, Kennedy and Stonehouse (2009), acknowledged the difficulty of defining the pedagogical leader role in reconciling the diverse background characteristics of ECEC educators responsible for putting this role into practice. When the NQS was introduced in 2012, there was initial criticism by some ECEC educators that the role brief for this position was unclear and educators were looking for further clarification of requirements. The authors of the EYLF responded that this lack of clarity was deliberate so that centres could formulate their own working model of pedagogical leadership (ACECQA, 2013). In their own analysis of the Early Years Learning Framework, ACECQA (n.d.) commented that although the word pedagogy is strongly embedded, there is no mention of leadership or pedagogical leadership. This suggests the need for discussion and analysis of pedagogical leadership in ECEC. Hence this case study may help to address this need as pedagogical leadership in embedding ECEfS pedagogical practices was explored.

Pedagogical leaders strive to implement the vision and philosophy of the centre through mentoring and working alongside other educators while advocating for viewing children as competent and capable (Rodd, 2013). Rodd continues that pedagogical leaders also make critical connections between families, schools and community. Reciprocal relationships between educators, children and families where children are seen as able and skilled align with principles of Efs (DET, 2009), shown in Table 2. In this case study these relationships and characteristics were a strong factor in illuminating how pedagogical leaders interacted with educators, children and families.

Pedagogical leadership can be described, then, as a practice of planning, reflecting and mentoring with other educators to implement learning practices at the centre through dialogue, reflection and learning. Pedagogical leaders lead other educators toward a shared vision and
influence and form close and reciprocal working relationships with children, families, other educators and the community. Marbina, Church and Tayler (2005), writing for the Department of Education in Victoria, linked pedagogical leadership practices to quality ECEC when they said that "to provide high quality, effective centres for children and families, there must be a commitment to ongoing learning, professional learning and reflective practice in environments that are respectful and responsive to children, families and professionals” (p. 5).

Pedagogical leadership has been influenced by educational and leadership theory. Some of these perspectives are outlined now.

2.2.6 Theoretical underpinnings of pedagogical leadership

Pedagogical leadership is informed by educational and leadership theories. Exploration of these theories can provide insights to how the ECEC field has evolved to where the Educational Leader’s position is now legislated in centres.

Early childhood education theorists such as Vygotsky and Bruner have offered their thoughts on pedagogy and they both recognised the importance of a learned adult in the learning process. Vygotsky’s (1978) social constructivist theory called it co-construction. Bruner’s (1996) constructivist theory emphasized the adult’s role of supporting a child’s metacognition by referring to the importance of “equipping her with a good theory of mind—or a theory of mental functioning” as well as the practice of scaffolding where adults support children as they acquire a new skill (p. 64). Mortimore (1999) affirmed that “our understanding of cognition and metacognition has influenced the conceptualization of pedagogy and that pedagogical leaders are thinking practitioners” (p. 7).

In recent times, there has been an explosion of interest in the philosophies and teachings of the Reggio Emilia education system in Italy (Thornton & Brunton, 2009). The influence of this education movement is widespread in the ECEC field. One of the work roles espoused in this movement is that of a pedagogista. This role includes mentoring others in curriculum and programming in a holistic way. There is a clear link here between this role and that of Educational Leader in Australian ECEC.

Friere (1970), a critical pedagogy theorist, considered how education could provide individuals with the tools to better themselves and strengthen democracy to create a more egalitarian and just society. Phillips, in Davis and Elliott (2014), stated that critical theorists such as Friere (1974) acknowledge that social change is cultivated through a critical awareness of unjust practices and taking action to address these. Critical theory discusses how the traditional
power base belonging to the adults in the learning relationship might be challenged so that children and adults can work together more equally (MacNaughton, 2005). New leadership trends may support this notion where children are researchers on a continuum of learning rather than passively absorbing information imparted by the traditional pedagogical leader. Of relevance to this study, it is important to note that EfS has been strongly influenced by critical theory (Davis, 2010b). In critical theory, educators ask questions about what learning is occurring for children rather than simply doing what has always been done pedagogically. City of Casey Early Childhood Research Collective (2012) added that “an important part of critical theory is that it helps teachers address issues of social justice in curriculum because it provides a way of reflecting on how education meets the needs of a diverse range of children and families” (p. 5). Educators will then make changes according to this thinking. In this way the needs of a diverse range of children are met (City of Casey Early Childhood Research Collective, 2012; MacNaughton, 2005). As noted in the EYLF “critical theories invite early childhood educators to challenge assumptions about curriculum, and consider how their decisions may affect children differently” (DET, 2009, p.11).

Children as capable, competent agents of change is a strong pillar of ECEfS. Piaget, an eminent child development theorist, stated that “the principle goal of education in schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done” (Duckworth, 1964). This has relevance for this study as two of the principles of ECEfS are transformation and change and lifelong learning shown in Table 2.

As well as educational theories, leadership theories have influenced the ECEC field. Trait theory which examines habitual patterns of behaviour, thought and emotion was first postulated by Carlyle in the 1840s and then later expanded by Galton in 1869. One of the earliest leadership theories, it was the result of research into personality characteristics that were considered essential for leadership. More recently, leadership writers such as Fleenor (2006) espouse the contingency approach to leadership as an interaction between an individual’s traits and the centre situation. As will be outlined in Chapter Four, the case study site revealed how the leader’s traits interacted with the centre in order to lead the team through the NQS process specifically in the area of EfS using SPLE.

In contrast with many earlier leadership models applied to school administration (e.g. situational leadership, trait theories, contingency theory), instructional leadership focuses on the manner in which the educational leadership is exercised by school administrators and teachers to bring about improved educational outcomes (Hallinger, 2003). Instructional leadership
involves a combination of expertise and charisma, where leaders are ‘hip-deep’ in curriculum and instruction, and work alongside teachers on the improvement of teaching and learning (Murphy & Hallinger, 1986). Instructional leaders are goal-oriented, focusing on the improvement of student academic outcomes and are viewed as culture builders. They have high expectations and standards for students, as well as for teachers (Mortimore, 1993). Hallinger (2003) identified three dimensions of instructional leadership. These are defining the school’s mission, managing the instructional program, and promoting a positive school-learning climate. There is an emphasis on the positional leader of the school.

More recently, educational theories about leadership show that pedagogical leaders are aware of, and can make others aware of, their own learning through reflection and dialogue (Rodd, 2013). Rodd posits that higher level thinking will result allowing educators to think more deeply and more freely rather than learning and acting on what is already known.

Pedagogical leadership is a fluid concept that can be enacted in many ways. The tasks of a pedagogical leader are outlined now.

2.2.7 Tasks of a pedagogical leader

According to Rodd (2013), once the vision and goals of the organisation are established, a leader engages people to take on tasks and communicates a sense of direction. This aligns with the role of a pedagogical leader which is to create an atmosphere of reflection, monitoring and assessment of children’s learning programs and staff practices (Rodd, 2013). According to MacNeill and Silcox (2003), however, this can only be achieved by a leader who has a working knowledge of successful and informed pedagogical practice giving them credibility. ECEC authors Coughlin and Baird (2013) suggest that “pedagogical leaders commit to using practices and allocating resources that build an intentional culture where learning and growing happens in relationship with others” (p.5). They state that rather than educators concentrating on teaching, the emphasis is on the pedagogical leader and other educators working together within an atmosphere of deep dialogue as researchers, through internal and external professional learning. In this way they build a learning community and culture around the why, how and when of learning. Chapter Four of this thesis will outline how the case study site revealed such a community of learners and the professional learning opportunities that arose.

Pedagogical leadership tasks include having a clear vision of learning outcomes for children and the ability to guide others and reflect alongside them in an evolving journey of continuous improvement (Rodd, 2013). This is an integral part of the assessment and rating
process in which the case study centre demonstrated the mandated requirements of the National Quality Standard, in relation to pedagogical leadership. As part of continuous improvement, the pedagogical leader should consider the strategies needed to improve the educational program in the approved centre (ACECQA, n.d.). In this way a culture is created where learning by everyone, with everyone, is the goal as well as the means to achieve quality. As part of the legislative requirements and the National Quality Standard centres must document this process and include it in their Quality Improvement Plan (QIP) (ACECQA, 2014) which is then used by an accredited assessor to assess and rate the centre. The link between leadership and quality is indicated here and was one focus of this research.

2.2.8 Types of pedagogical leadership

This section examines four types of leadership identified in the literature which are relevant for pedagogical leadership, specifically, in the ECEC sector. Distributed, collaborative, transformational and catalytic leadership are explored in detail here.

**Distributed leadership in early childhood education and care**

Distributed leadership is common practice in ECEC. Tasks are delegated and shared among people (Pearce & Sims, 2001) suggesting a culture of trust and respect where openness is imperative. This can be applied in an ECEC centre where tasks can be allocated according to the expertise of educators who take on particular responsibilities. According to Ebbeck and Waniganayake (2004), distributed leadership is based on valuing knowledge or expertise in diverse spheres of activity including curriculum, advocacy, personnel and community development. Jones and Pound (2008) state that distributed leadership approaches acknowledge that all ECEC educators have a sound knowledge base or expertise in educational pedagogy. Distributed leadership results in staff motivation and increased inspiration which contributes to continuous improvement of practices within the centre (Rodd, 2013).

**Collaborative leadership in early childhood education and care**

Collaborative leadership is another common form of pedagogical leadership in ECEC and involves working together both internally and externally to the centre (Rubin, 2009). External work includes liaising with other ECEC centres in the local area, community agencies, medical professionals, commercial organisations or beyond. Similar to distributed leadership, internal work includes all staff having a genuine input into decisions and contributing to the culture of the centre (Rodd, 2006). Rodd stated that through the acts of an interconnected group of individuals, the possibility of shared or collaborative leadership is opened up. She continues that
in this model of leadership a broad base of knowledge and practice is established adding to continuous improvement in the centre.

**Transformational leadership in early childhood education and care**

Through the strength of their vision and personality, transformational pedagogical leaders are able to inspire other educators to change expectations, perceptions, and motivations to work towards common goals. In his seminal work on his leadership theory, Burns (1978) proposed that “transforming” leadership creates significant change in the lives of people and organisations. He said that such leadership redresses perceptions and values, and changes expectations and aspirations of employees. In ECEC this means that the leadership would inspire educators to critically reflect on their current practices and partake in continual improvement. Bass (1985) expanded these ideas suggesting that “transformational” leadership involves motivating followers to develop into leaders themselves by responding to their needs and empowering them by aligning goals to individuals, the group and the organisation. In this way, leaders gain the trust, respect and admiration of their followers. Adding further detail, Leithwood (2000) cited individualised support, shared goals, vision, intellectual stimulation, culture building, rewards, high expectations and modelling as features of transformational leadership.

Later, Bass and Riggio (2006) proffered four components to transformational leadership. These are:

- Idealised influence where the leader is a role model and is admired for working alongside other educators;
- Inspirational motivation where the leader has the ability to inspire and motivate followers adding to their charisma;
- Individualised consideration where leaders demonstrate genuine concern for the needs and feelings of followers thus bringing out their best efforts; and
- Intellectual stimulation where the leader challenges followers to be innovative and creative leading to a higher level of performance.

These four components can be seen in action at the case study site as detailed in Chapter Four.

**Catalytic leadership in early childhood education and care**

Catalytic leadership is another leadership style with potential relevance to this study. In citing their school based research, Silcox and MacNeill (2006), state that catalytic leaders, like transformational leaders, are agents of change and a key force in motivating educators towards
continuous improvement with their infectious positive energy rousing others to strive for higher quality meaning and practices. Catalytic pedagogical leaders are ground-breakers with high levels of credibility within and, as a point of difference to transformational leadership, outside the teaching profession. (Silcox & MacNeill, 2006).

According to MacDowell Clark (2012) referring to ECEC, the key features of catalytic leadership which distinguish it from more common concepts of leadership are that

- The pedagogical leader’s position of influence rather than authority is key to becoming a change agent and leading practice.
- The pedagogical leader as a catalyst brings about change through small, incremental steps.
- Change surfaces through the recognition of potentiality rather than being imposed from above.
- Catalytic leadership is a creative and dynamic process rather than a set of attitudes and behaviours and that pedagogical leaders move in parallel to that of the children to create truly dynamic learning communities and a democratic modelling of lifelong learning (p. 399).

**Interaction between these four types of leadership**

The four types of leadership presented above are of relevance to ECEC. They merge well in practice where, in some cases, there are inspirational leaders who are able to work well with others both within and outside the centre allocating tasks or empowering others to take the initiative in tasks, thus allowing new leaders to be born within the centre (Rodd, 2013). Continuous improvement will more likely occur in the whole centre as each area of expertise is fully explored and grown (Rodd, 2013). Ideally, leadership in ECEC is based on a merging of all four: distributed, collaborative, transformational and catalytic models, where inspirational educators work together with and lead a team to move projects and practices forward towards a shared vision and may provide this inspiration outside the centre (Rodd, 2013). This model fits well with EfS principles (DET, 2009), Table 2, where educators and children work and learn together on emerging issues requiring creativity, communication and inspiration.

In relation to EfS, an example of distributed, collaborative, transformational and catalytic leadership is described by Gibson (in Davis, 2010a) in relation to the Queensland University Campus Kindergarten’s Sustainable Planet Project. Gibson proposed a “fluid type of leadership” (p. 87) where elements of transformational and distributed leadership were beneficial. At the ECEC centre described in Gibson’s study, a learning community of staff at all levels, whose capacity was constantly elevated, was created through strong leadership that displayed energy, harmony, forged consensus, high standards and a futures orientation. All educators in the centre
were seen as leaders who could initiate and impact transformational change resulting in empowerment and ownership. Gibson stated that this included “democratic, self-generating notions of leadership (that) are built upon trusting and collaborative relationships between colleagues” (p.88) resulting in a culture of embedding EfS in this centre to a high level. This project was seen as ground-breaking in the ECEC field (Davis et al., 2005). While it relied on the positive energy of the positional leader to succeed, collaborative leadership was also evident as leaders were developed within the centre among the educator team and the centre interacted and collaborated with outside agencies. The way leadership was applied in the research site case study reflected these features from the Sustainable Planet Project as well as additional perspectives, as outlined in Chapter Four.

2.2.9 Introducing sustainable pedagogical leadership

Nicholson and Maniates (2016) apply a post-modernist view on ECEC pedagogical leadership stating that early childhood professionals’ identity is “multiple, dynamic, relational, emotional as well as cognitive, and (in different contexts) potentially contradictory” which opens up “emancipated possibilities of thought, reflection and action in our field” (n.p). These ideas complement the four leadership types presented above. They challenge positional, linear, lock-step approaches to leadership and leadership learning characteristic of traditional conceptions of leadership as well as expanding the notion of distributed, collaborative, transformational and catalytic leadership. This post-modern perspective offers an opportunity to introduce a fifth type of leadership that the researcher has called Sustainable Pedagogical Leadership in ECEC (SPLE).

This study provided an opportunity to deeply explore ideas around sustainability and pedagogical leadership and as it did so it became apparent that existing ideas around leadership and pedagogical leadership in ECEC did not fully explain the ideas and practices that were evident in the case study site. This lead to a search of terms in data bases in the ECEC pedagogical leadership and ECEfS fields that might better capture the synthesis of the two fields that the study was illuminating. The search identified studies and papers that touched on aspects of SPLE but did not encapsulate all the aspects the researcher identified in my research in one definition.

Hunter and Sonter (2012) captured the relational, ethical and inspirational aspect of ECEC pedagogical leadership by referring to leading by the heart and soul, using magic, being moral, creating merriment and mobilising others. Thornton, Wansbrough, Clarkin-Phillips, Aitken, and Tamati (2009) also reported on the relational aspects of pedagogical leadership in ECEC and
also examined change management processes and structures needed for good pedagogical leadership. Macfarlane, Cartmel, and Nolan (2012) identified inter-professional practices of consideration of multiple perspectives, respectful relationships, critical thinking and reflection and strong personal identity as key elements that contribute to sustainable pedagogical leadership in ECEC. The professional learning and critical reflection aspects of sustainable pedagogical leadership in ECEC were identified by Ord et. al. (2013). In their study mentoring and coaching methodology across a diverse range of early childhood settings was trialled with the aim of enhancing pedagogical leadership through engaging in change conversations to improve teaching and learning. Tillman (2017) identified that collaboration, having a clear focus, creating a data-driven environment, and developing accountability were the most important leadership practices needed in the implementation and sustainability of a collaborative community.

For the purpose of this study, the term SPLE was coined to adequately represent what was found at the case study site and is therefore put forward as a useful term for pedagogical leadership that emphasises sustainability in the ECEC field. SPLE is defined as guiding others by working toward a clear vision for sustainability; engaging in ethical and inspiring practices underpinned by sustainability, mentoring and critical reflection; forging strong and caring relationships; empowering educators with rich and varied professional learning; providing distributed leadership opportunities; and, providing a positive and inclusive and sustainable organisational culture.

2.2.10 Summary of Pedagogical Leadership in ECEC

In summary, pedagogical leadership in ECEC can be described as a practice of planning and reflecting with and mentoring other educators in not only implementing pedagogical practices at the centre but doing so through dialogue, reflection and learning. Pedagogical leaders demonstrate vision and influence and encourage reciprocal relationships between children, families, educators and communities. Pedagogical leadership may be distributed, collaborative, transformational and catalytic. A post-modern approach which challenges the positional, linear, lock-step approaches from traditional leadership expands these four types of pedagogical leadership. However, the terms and conditions of the Educational Leader’s role are not specified in the legislation in Australia, leading to wide ranging interpretations of this role in ECEC centres. Educational and leadership theories inform the way in which leadership is enacted in ECEC. For the purposes of this study, pedagogical leadership is the focus area of leadership that was examined as it was most closely related to the research questions and the identified gap in the ECEC field. The research showed that SPLE was being exercised at the case study site.
Contemporary research in sustainable pedagogical leadership in ECEC was sought and it was noted that a definition of SPLE was not found in databases supporting the new term of SPLE as an innovation for ECEC.

2.2.11 Summary of Leadership Section

Leadership in ECEC is an area of renewed interest in the Australian context due to recent legislative requirements and ongoing research into high quality ECEC centres. As a result, articulation of leadership practices and growing leadership capacity at all levels of a centre to promote quality ECEC is more overt. Research suggests that leadership approaches in ECEC aspire to be distributed (Ebbeck & Waniganayake, 2004; Pearce & Sims, 2001; Pound, 2008; and Rodd, 2013), collaborative (Rodd, 2006), transformational (Burns, 1978; Bass, 1985; Leithwood, 2000; and Bass & Riggio, 2006) and catalytic (Silcox & MacNeill, 2006 and McDowell Clarke, 2012). The post-modern approach further expands these four areas (Nicholson & Maniates, 2016). Through such inclusive and change-oriented approaches, all participants, both internal and external to the organisation, can contribute to the continual improvement of centre quality. Challenges to pedagogical leadership include recognition of the role by educators and the community as well as time and professional learning in which to acquire leadership skills within the ECEC centre. Educational and leadership theories were introduced and their influence on pedagogical leadership and EfS was noted. Educational theories noted the importance of supportive adults in the educational process and that transformation and change can occur as children are empowered to drive their own lifelong learning. Leadership theories noted the relationship between traits and context for leaders and that a transformational leadership includes influence, motivation, stimulation and consideration of others.

It is widely recognised that sound pedagogical leadership results in high quality education outcomes for children (Effective Provision of Pre-School Education (EPPE) study, UK, 2012). The study outlined in this thesis explored how the pedagogical leadership informed and supported educators in implementing high quality ECEfS. With the emergence of the Educational Leader position in ECEC centres, interest in extending knowledge about leadership has arisen and gaps in research in this area have become apparent. In order to fill these gaps, my own observations as TAFE practitioner and researcher show recent increase in the number of books, journal articles and professional learning opportunities offered in the area of pedagogical leadership in ECEC. This research will contribute to this growing base of knowledge and contributes the new term SPLE which describes the pedagogical leadership found at the case study
site and could be applied to the wider ECEC sector. This section of the literature review has explored leadership. The following section explores the third topic of the literature review that is quality in ECEC.

2.3 QUALITY IN EARLY CHILDHOOD EDUCATION AND CARE

This study sought to discover how quality ECEfS was understood and enacted at an ECEC centre and how the pedagogical leaders informed and supported educators implementing ECEfS. The quality of ECEC has become high on the agenda in Australia and internationally in recent times due to, for example, the introduction of the Australian NQS in 2012. In this section, quality ECEC is defined and contextualised, what quality means from different perspectives is explored and indicators of quality ECEC are identified. A future focus for the quality agenda in ECEC is noted.

2.3.1 Quality ECEC defined

Quality in ECEC is a subjective notion however the Australian ECEC field has attempted to measure quality through the introduction of industry standards. Quality ECEC definitions researched as part of this literature review include different types and perspectives of quality ECEC. These are explored below after which a definition of quality ECEC developed by this researcher and utilised for this study is put forward.

When researching what is high quality ECEC, there is global agreement that the term is difficult to define due to its complex and multifaceted nature. La Paro, Thomason, Lower, Kittner-Duffy and Cassidy (2012) reviewed research from 2003 to 2010 that used the ECERS-R quality rating scale and found that interpretations of quality among those studies varied despite the use of the prescribed tool. Rating scales are further explored in section 2.3.2 of this thesis. Logan, et. al., (2012) reference their historical study of quality ECEC from 1972 to 2009, noting that numerous assumptions and an eclectic mix of philosophical beliefs and perspectives contribute to different understandings of quality. They add that contributing factors to the difficulty of defining quality include different cultural expectations of educators, families and children, the centre type and its location, and the various government policies in interrelated fields that operate in diverse regions of Australia.

In a comprehensive international study of ECEC in 2006, the Organisation for Economic Co-operation and Development (OECD) identified key aspects of quality for ECEC. These were:

- educational content and practice including the curriculum framework;
underpinning knowledge of child development and application of pedagogical practices of staff;

- process quality including the day to day experiences of children;

- operational quality including the management and leadership (policy and process) guiding centre operations; and

- child-outcome quality standards, including the physical environment and social interactions that improve the present and future well-being of children.

This list, particularly the fourth point, identifies the links between leadership and ECEC quality that leads to better outcomes for children. It emphasises that management and leadership guide centre operations and that the underpinning knowledge of educators is key. It also shows that both structural and process quality elements must be present. These two latter terms are now explained.

Structural quality consists of the processes and frameworks in which the ECEC centre operates. Ryder, Davitt, Higginson and Smorti (2016) define it as the organisation/cultural leadership of the centre as a whole, rather than any single routine or process. Examples of structural quality are classroom materials, curriculum, teacher education and teacher-child ratios (Taguma, Lijtens & Makowiecki, 2012). An expanded view of structural quality is detailed in the 2006 OECD Starting Strong II document. It includes program standards, stimulating learning environments, teacher certification, strong staff supports, professional learning, the change process, inquiry and dialogue. Further examples of structural quality are offered by Ryder, Davitt, Higginson and Smorti (2016) when they cite strategic planning, professional development, delegation, staffing, transitioning staff and staff recruitment as examples of structural quality. Included in definitions of structural quality is that critical reflection of ethical and moral topics should be used to determine quality “rather than viewing the discourse of quality as taken-for-granted, appropriate and standardized across cultures, communities and/or early childhood programs” (Green, 2007, p.98).

Process quality is what children actually experience in the program. David (2005), a researcher from the US interested in the value of quality physical spaces for children, identified that young children learn best when they have opportunities to play and talk, make choices, share thinking with adults and where adults are sensitive to their needs, thus emphasising the human element of quality. The centre may have the best physical facilities but without excellent human interactions, high quality learning will not be experienced by the child, families, educators, and,
in turn, the community. Australian researcher, Huntsman’s (2008) review of research evidence about quality ECEC determinants, stated that high quality care promotes optimal child outcomes in all domains of development, while low quality care is associated with negative outcomes for children. Huntsman found that good reciprocal relationships between educators and children are critical in ensuring high quality developmental outcomes for children.

Ryder, Davitt, Higginson and Smorti (2016) define process quality as the independent pedagogical/team leadership procedures that support the daily routine running of the centre. This has an influence on their well-being and development and includes human interactions such as teacher-child and peer-peer interactions. This notion was supported by USA researchers such as Vandell and Wolfe (2000), educational psychology researchers; Cassidy, Hestenes, Hansen, Hegde, Shim, & Hestenes (2005) in their study of research using the ECERS-R quality rating scale; and Hamre and Pianta (2007) writing about preschool and first years of school.

The diagram below offers an explanation of what structural and process quality include, then illustrates that these two types of quality result in a wide range of social and academic outcomes for children (adapted from Pianta, La Paro & Hamre, 2008). This diagram has helped the researcher focus on specific types of ECEfS quality making possible a richer level study and analysis.

Figure 4: Elements and outcomes of quality ECEC

The Effective Provision of Pre-School Education (EPPE) study in the United Kingdom, reported by Sylva et al. (2012) identified quality education dimensions such as: structure (facilities and human resources); process (the everyday educational and care experiences of children); and outcomes (the longer term consequences for children). The EPPE study showed a
clear relationship between the quality of early childhood provision and children’s developmental outcomes. It highlighted the relationship between input measures of quality, in this case structures and processes, and output measures of quality; that is outcomes for children. Again, it can be seen that quality consists of materials and structures (structural) as well as the human element (process) (Sylva, 2012). In this case study, key elements of both structural and process quality with regard to EfS in the ECEC centre were examined.

The Australian Effective Early Education Experiences for Kids (E4Kids) study (Tayler, 2016) is a longitudinal study following 2,500 pre-school aged children for five years as they attend different ECEC centres (or no centres) to ascertain the impact of quality ECEC on their overall development over time. In this study, the learning relationship (an example of process quality) between educators and children was closely examined. This study, though not yet complete, has so far examined three variables of process quality: emotional support, organisation for learning, and instructional support. In the study, educators were measured to be medium to high in emotional support referring to the positive or negative climate and teacher sensitivity. Organisation for learning, referring to behaviour management, productivity and instructional learning formats were also a medium to high area for educators. However instructional support, referring to concept development, quality feedback and language modelling was not a strong area for educators. The E4Kids interim study findings suggest that it is the depth of reciprocal learning relationships that is important for children in experiencing quality in ECEC centres (Tayler, 2016). The E4Kids study has found to date that pedagogical leaders need to work closely with educators to foster the skills necessary to form these high quality learning relationships (Tayler, 2016). The case study research outlined in this thesis explored how the pedagogical leader worked with educators to encourage forming of these close reciprocal relationships between educators and children. This aspect of social sustainability was key to SPLE in the centre.

Reviewing literature on quality ECEC raises the point that what constitutes high quality depends on the perspective of the stakeholder. As stated by Katz (1995) perspectives may come from ‘insiders’, such as practitioners, and ‘outsiders’, such as inspectors and researchers. They may be ‘bottom up’, in that they include the views of children and families, or ‘top down’, from the perspective of owners and funders. Da Silva and Wise (2006) stated that, traditionally, ECEC quality has been defined from a child development perspective. However, how quality is defined depends on the stakeholders being considered and this could include children, families and educators. From an educator perspective, Huntsman (2008) observed that “the most significant
factor affecting quality appears to be caregiver education, qualifications and training – aspects of structural quality...” (p. iii). This case study showed that support in the form of professional learning for the leaders and other educators contributed to enacting and embedding EfS programs and practices, may have also contributed to quality overall, as outlined in Chapter Five. Kagan and Stewart (2004) writing about preparing students for an interconnected global future noted that, in the past, quality education was measured by exploring staff turnover, salaries and conditions, and peer mentoring: structural quality, omitting important factors such as the children’s level of social and emotional development: process quality. According to Dunphy (2008) a characteristic of quality education is children and educators working alongside each other to co-construct learning leading to a bond in mutual discovery. This relationship is a key characteristic of ECEC and a core principle of EfS and sits at the heart of SPLE.

A definition of quality ECEC for this study, taking into account the above literature review, includes elements of both structural and process quality and the different perspectives of participants. Thus, I utilise the definition proposed by Sylva et al. (2012) that high quality ECEC centres have highly trained ECEC educators who have excellent reciprocal relationships with children, their families and community allowing for co-construction of learning. These high quality relationships enable children to develop optimally in all developmental domains such as physically, cognitively (including creativity and language), socially, emotionally and spiritually. All of this occurs within relevant and supportive frameworks and processes which take into account the diverse perspectives of all participants in ECEC programs.

2.3.2 Measuring quality

There have been several attempts to measure quality ECEC through the development of various quality scales. Some focus on both structural and process quality such as the Early Childhood Environment Rating Scale-Revised (ECERS-R, 1996) and the Infant and Toddler Environment and Rating Scale (ITERS-R) (Harms, Clifford & Cryer, 1998). These scales identify the physical setting, curriculum, caregiver-child interactions, health, safety, scheduling of time, indoor and outdoor play spaces, teacher qualifications, play materials, centre administration, and meeting staff needs as areas that can measure program quality. Other scales focus on process quality only with interactions between educators and children as indicators of quality. One example is the Observational Record of the Caregiving Environment (ORCE, NICHD Early Child Care Research Network, 1996).
As noted, there is some contention about what quality is and, therefore, how it can be measured. There are some authors in the ECEC field who question the notion of quality as it is discussed in current approaches to ECEC. Dahlberg, Moss and Pence’s 1999 seminal book ‘Beyond Quality in Early Childhood Education’ questioned the notion of quality in ECEC through a post-modern perspective using different ‘languages’. In this context ‘languages’ refers to perspectives from different participants in the ECEC centre. They offered an alternative view of what quality could mean citing such notions as the rich child, the co-constructing child, the child as citizen and a place for children and childhood. They discussed the importance of meaning making and pedagogical documentation and about the greater concepts of power and freedom. Dialogue, ethics, reflection and contingency were also suggested as ways to reflect quality in an ECEC centre. Later, Moss and Dahlberg (2008) discussed quality as ensuring the efficient production of predefined normative outcomes, usually developmental, or simple learning goals that are “subjective, value-based, relative and dynamic” (p. 1). Moss and Dahlberg’s work as along with that of researchers such as Layzer and Goodson (2006) raise questions about quality ECEC:

- Who are the experts and stakeholders who influence what quality is?
- What research is it based on?
- Are cultural differences taken into account?
- Do different centres require different indicators of quality?
- Where is the voice of children in this process? and
- Should quality be prescribed and measurable?

Drawing on the above authors’ ideas, Peralta (2008), writing about children’s right to a quality education, proposed that the quality debate should include a postmodernist handling of the subject where diversity of contexts and situations, multiplicity of options and, especially, the opinions of the agents involved are embraced rather than using an objective set of criteria. Therefore determining the level of quality of diverse centres will depend on an inclusive approach taking into account different perspectives and measures. Those questioning what quality means in ECEC critique instruments of assessment and rating (Dahlberg, Moss & Pence, 2007) such as the NQS currently in place in Australia.

Since the 1990s, post-modern reconceptualists have been challenging universal ‘truths’ about educating young children. Conkbayir and Pascal (2014) suggest that ECEC educators need
to be innovative in their thinking and practices in order to meet the diverse and dynamic needs of children and families. The authors state how this may look in practice when educators

Challenge universal givens and the hierarchy of knowledge, accept that there are many truths and realities and all are valid, reject the authoritarian concept of what knowledge is, seek out the multiple perspectives of knowledge which exists, redistribute power less hierarchically between practitioners, parents and children (p. 151).

This literature review demonstrates that the notion of quality is still contested. Chapter Four outlines how the educators at the case study site perceived the concept of quality ECEC.

Despite the diverse definitions and contention about what constitutes quality ECEC as outlined in this section, the Australian government has produced legislation whereby centres can be measured for quality, and these are explored below. Elements of structural and process quality are included in these legislative requirements which come together to form a framework of quality for ECEC. This case study explored educators’ understanding and embedding of ECEfS as they undertook the NQS process and how pedagogical leaders supported and informed educators throughout this process at Green Leaf ELC.

2.3.3 Legislation and policy about quality in Early Childhood Education and Care


The United Nations Convention on the Rights of the Child, a human rights treaty ratified by most countries around the world, outlines the minimum rights a child should expect in order to live a good life. Within this document are a number of articles of relevance to this study. The notions of adult decisions in the best interests of the child, respect for the views of the child including their right to participation, education allowing children to develop to their full potential and children learning to protect the environment are included in the Articles. Davis (2014), however, has questioned the current scope and focus of the existing children’s rights document
in relation to sustainability issues and has proposed revisioning rights through a sustainability lens. As well as broadening rights to include ideas about collective rights, intergenerational rights, and bio/ecocentric rights, Davis’ revisioning emphasises agentic participation rights for children as a particular element of quality in ECEC.

The Early Childhood Australia Code of Ethics (2016) is another key guiding document to assist early childhood educators toward ethical pedagogical practice. In this code it is stated that in relation to their work with children, educators will “collaborate with children as global citizens in learning about our shared responsibilities to the environment and humanity” (Early Childhood Australia Code of Ethics, 2016, n. p.). This notion contributes to quality and sits closely with EfS principles (DET, 2009) outlined in Table 2.

The NQS may contribute to a clearer understanding of what constitutes quality in ECEC. The NQS defines attributes of quality in its guiding principles stating that “the rights and best interests of the child are paramount; children are successful, competent and capable learners; equity, inclusion and diversity underpin the framework; Australian Aboriginal and Torres Strait Islander cultures are valued and the role of parents and families is supported and respected” (p.8). Of most interest to this study, 2011 NQS Quality Area 3 requires that children are part of sustainable learning and practices in their ECEC centre. However, there is some conjecture about the specific placement of sustainability in Quality Area 3 because it relates to the physical environment, thus emphasising only one area of sustainability – the environmental dimension. As was explained early in this chapter, sustainability is a broad and inclusive concept. Australian researcher Stonehouse, in her 2013 Facebook page What do you think? (now no longer available) asked the question “How would it affect your thinking and what you do about children’s relationship with, understanding of and respect for the physical environment if NQS Elements 3.3.1 and 3.3.2 were in Quality Area 1 Educational Program and Practice instead of Quality Area 3 The Physical Environment?” This raised the question of how broadly ECEC educators think about sustainability and whether they should be emphasising EfS as part of holistic child development rather than focusing on only the physical environment. The revised 2017 NQS has maintained environmental care by children in the third quality area.

2.3.4 Rating Quality

The assessment and rating process in ECEC centres includes a written report on continuous quality improvement and a visit by an authorised officer from the state’s department of ECEC to assess the seven Quality Areas of the NQS. This is accomplished through direct observation of
practices, sighting documents to support continuous improvement and discussions with educators. A rating is then given according to the level of quality reached in each Quality Area.

To provide context for this aspect of the literature, the relevance of the NQS for this study should be explained – a matter that is revisited later in the thesis. As part of the NQS Assessment and Rating process undertaken by the case study site, the result of an overall ‘exceeding’ standard was gained. This was a remarkable achievement considering the centre had been opened for only six months. Exceeding ratings are granted if the centre has an exceeding standard for four out of the seven Quality Areas. The rating of the centre of ‘meeting’ the NQS in element 3.3 (Sustainability) is reflective of the findings in the ACECQA snapshot report, May 2016, where Quality Area 3 was mentioned as the one that centres find most challenging. It should be noted that a ‘meeting’ rating is not considered poor practice but, rather, it is an indicator of high quality whereas an ‘exceeding’ rating indicates quality over and above the already high expectations.

According to the ACECQA website, the NQS sets a high benchmark. ACECQA states that while all centres strive for the highest quality possible, not all centres will achieve this especially in their first attempt in the NQS system. This findings of this study explored factors within the pedagogical leadership of the centre in embedding EfS pedagogical practices that may have contributed to this result. Quality Area 7 (Leadership) was given an ‘exceeding’ rating at the research case study site thus contributing to the case study site overall ‘exceeding’ rating.

In their response to the Australian Government’s (2014) Productivity Commission into Child Care and Early Childhood Learning, the National Early Childhood Education for Sustainability Alliance (2014) indicated the trend that ECEC centres were finding compliance with Quality Area 3, Sustainability, a challenge. The Alliance stated that this situation was beginning to change, especially in areas of Australia with longstanding support networks where up to 89% of centres were assessed as meeting or exceeding the National Quality Standard. This indicates that with time, knowledge, experience and support, the achievement of EfS goals is possible. Therefore the change in the 2018 NQS in Quality area 3 to remove ‘sustainability’ and leaving being ‘environmentally responsible’ intact may reduce the scope of ECEfS.

As also noted earlier, a key part of the NQF is the EYLF, the approved curriculum framework for children aged birth to five years. It describes the practices and outcomes that support and enhance young children’s learning as well as children’s transition to school. As stated in the NQS Professional Learning Program eNewsletter no. 32, 2012, the EYLF includes as indicators of quality, “responsiveness to children, intentional teaching, continuity of learning, respect for diversity and reflective practices” (DET, 2009, p.2). The EYLF Outcome 2 states that
“Children are connected with and contribute to their world” with one of the elements within this outcome being “children become socially responsible and show respect for the environment” (DET, 2009, p.3) showing a focus in this national curriculum framework on sustainability albeit emphasising the environmental dimension. This researcher believes the new concept of SPLE proposed as a result of this study has the potential to support both the NQS and the EYLF Outcomes, thus contributing to enhanced quality of ECEC services in Australia. SPLE supports quality ECEC and learning outcomes for children because educators are guided toward a clear vision for sustainability, are engaged in ethical and inspiring practices related to sustainability, mentoring and critical reflection and they are supported with strong and caring relationships in a positive organisational culture. Educators are empowered with rich and varied professional learning and provided opportunities to lead the educational program through distributed leadership.

2.3.5 Summary of Quality in ECEC

The third topic of this literature review addressing quality in ECEC has considered that a definition of quality ECEC is difficult to articulate due to the complex and changing nature of this field and the limited empirical research into ECEC quality. While some researchers deride attempts to define quality, the Australian government has developed a NQS by which all ECEC centres are measured for quality. In the NQS, emphasis is on both process and structural quality.

Research reviewed in the literature points to major contributing factors to quality ECEC of the relationships between educators, children, their families and the community within supportive processes and frameworks. Guiding documents for this legislation included those supporting children’s rights and ethical behaviour of educators.

In the present research and political climate there is ongoing contention about what constitutes quality ECEC and it remains to be seen where this leads in the short and long term. Some authors are calling for an inclusive definition of quality where a global perspective is valued. The demonstration of quality practices at the case study site reflected an inclusive definition of quality as well as evidence of children’s voice and this is illustrated in Chapter Four. SPLE was offered as a way to contribute to quality ECEC.

2.4 SUMMARY OF CHAPTER TWO

This study focused on how educators at one centre understood and enacted ECEfS and how the pedagogical leadership at an ECEC centre informed and supported educators in implementing quality ECEfS. The concept of SPLE has been identified and is further discussed
in Chapter Five. This literature review has encompassed reporting on and analysing three topics relevant to this study: ECEfS, pedagogical leadership in ECEC and quality in ECEC. Through this review, it was proposed that addressing the interrelationship of these three areas may lead to improving the national quality standard for ECEC particularly in relation to sustainability and pedagogical leadership.

The literature review also identified minimal research and in some cases significant gaps about ECEfS, pedagogical leadership and quality ECEfS, and their interrelatedness. The OECD report, Starting Strong III (2012), stated that

there is a need for more research on targeted quality aspects: which practices best achieve a higher level of quality, and the effects of adaptation to local needs on child outcomes and quality provision. Research in these areas has great potential to inform policy and (the) general public. (p. 2)

The following chapter outlines how this research study was designed and conducted. This research study sought to discover educators understanding of ECEfS and how this could be enacted then how the pedagogical leadership could inform and support educators in this process.
Chapter Three: Research Design

This thesis outlines a qualitative, historical case study of pedagogical leadership in embedding early childhood education for sustainability (ECEfS). The previous two chapters introduced the study and provided a literature review respectively. This chapter explains how the research was designed and implemented in order to answer the research questions. First, a rationale for the chosen design is outlined, followed by details about the study’s context, timeline and participant selection. Data collection and analysis techniques are then detailed. Finally, ethical considerations and study limitations are discussed.

3.1 CASE STUDY DESIGN

The research employed a qualitative, historical, case study design to answer the research questions. Each of these terms will now be explained in relation to this study.

Baxter and Jack (2008) stated that qualitative case study is an approach to research that explores a phenomenon within its context, using a variety of data sources. This ensures that the issue is not explored through just one lens. Rather, multiple facets of the phenomenon are revealed and understood. For these reasons a case study design was chosen, so that multiple facets of sustainable pedagogical leadership in ECE could be explored. This study included data from interviews with the pedagogical leadership team and educators at the site, as well as analysis of relevant documents, social media pages, and photographs of pedagogical practices. The documents, social media page entries and photographs were used to support the statements of educators and leaders captured in the interviews.

A historical case study is a retrospective holistic description and analysis of a specific case (Merriam, 2014). Historical case studies often study a process that has evolved over time, as in the case with this research, how the pedagogical leadership informed and supported educators in embedding quality ECEfS pedagogical practices as part of continuous improvement in the NQS Assessment and Rating process. In particular, analysis was undertaken of how leaders and educators understood and enacted the NQS expectations leading to the assessment and rating of ‘exceeding’ the standard. Yin (2003b) stated that, typically, historical case studies deal with the “dead past” (p. 7) and so they must rely on documents as people are no longer available for interviewing. For this research, conducted in late 2015, the original pedagogical leadership team
from when the centre began operation was still employed so documents from 2013 to 2015 were accessed and retrospective interviews were able to take place. Yin (2003b) continued that, when research is being conducted about the recent past, interviews may be possible and this is where the historical method and the case study method overlap. He stated that case studies have the unique strength of dealing with a full variety of evidence such as documents, artefacts, interviews and observations as was the case in this research. In sum, this researcher conducted five one-on-one interviews and gathered seven documentation sources – Assessment and Rating Report, Quality Improvement Plan, centre policy, centre and Educational Leader philosophy, staff reflections and a questionnaire - to support the study’s findings.

To define what constitutes a case study, Creswell (2007) stated that “a case study is an in-depth exploration of a bounded system (e.g. activity, event, process, or individuals) based on extensive data collection”. Bounded means that “the case is separated out for research in terms of time, place, or some physical boundaries” (p. 465). In this research, the bounded system was the pedagogical leadership process of one ECEC centre that met and exceeded the NQS 3.3 and 7.1 through its leadership practices. Providing boundaries to the case ensures the study remains reasonable in scope (Baxter & Jack, 2008). The advantage of a case study approach is the close collaboration between the researcher and the participant, while enabling participants to tell their stories (Crabtree & Miller, 1999). This close relationship is explained in detail in section 3.7 of this chapter.

Further explaining what constitutes a case study, Yin (2003a) argued that a case study design should be considered when the focus of the study is to answer how and why questions and that the researcher cannot manipulate the behaviour of those involved in the study. He continued that contextual conditions are relevant to the study and that the boundaries are not clear between the phenomenon and the context. In this study, both research questions were ‘how’ questions as insight was sought about how educators understood and enacted ECEfS and how the leadership team informed and supported educators when implementing ECEfS. I looked retrospectively at actions that occurred and corroborated through documents therefore it was unlikely to be manipulated.

Baxter and Jack (2008) stated that case studies allow the researcher to explore individuals or organisations, simple through complex interventions, relationships, communities or programs. This fits well with this study as the research explored the process of how the centre leaders’ pedagogical practices informed and supported educators in embedding quality ECEfS in a long day care centre when implementing the NQS. The context of the single childcare centre is
relevant as the NQS focuses on rating quality against a set of criteria rather than comparing one centre directly with others.

Creswell (2012) stated that “the ‘case’ may represent a process consisting of a series of steps that form a sequence of activities” (p. 465). This study’s research site is undergoing a continual improvement process under the NQS system through pedagogical leadership involving a series of steps in their quality improvement plan. Creswell (2007) also stated that the case study “serves the purpose of illuminating a particular issue” (p. 465). In the case of this study, the particular issue of understanding and enactment of ECEfS and how leadership informed and supported educators in this process is highlighted.

A case study is appropriate, too, in the current context of the NQS in Australia because ECEC leaders and educators are seeking detailed information on how they can meet or exceed the standards in their own ECEC centres. Case studies provide an excellent opportunity to gain detailed insight into a case because they enable the researcher to gather data from a variety of sources and converge the data to illuminate the case (Baxter & Jack, 2008). Thus, the findings of this study hold the potential to provide ECEC leaders and educators with specific evidence-based insights about how they, too, may engage in implementing ECEfS.

3.2 CONTEXT OF THIS STUDY

A brand new ECEC centre was chosen for this study in June 2012. I have had a long relationship with the school and the early learning centre at the case study site. This relationship will be detailed in the ethical considerations (section 3.7). Because the centre was new, all systems, documentation and physical structures were newly formulated. Figure 5 illustrates that the case study centre was newly built, from the ground up, completed in June 2012. Six months later in January 2013, the centre participated in the process of Assessment and Rating of the NQS and gained an overall result of “exceeding”. At the time of data collection, the centre had not been re-assessed and re-rated, but had been participating in internal continuous improvement processes. One of the key objectives of the NQF is to promote continuous improvement in the quality of ECEC services. Services throughout Australia undertake self-assessment against the NQS completing their Quality Improvement Plan and use this as a tool to guide further improvement. For this study, historical data from the case study’s Quality Improvement Plans from June 2013 until December 2015 were collected and analysed.
The case study site, Green Leaf ELC (pseudonym), is located in the grounds of a primary school. Green Trees College (pseudonym) is an independent, non-denominational school located near a large town 50 kilometres from a state capital city in Australia. The 500 acre property includes a primary school, working farm, church, performing arts centre and a museum. It is surrounded by private acreage properties and faces a horse stud with large tracts of natural bushland in and around the school buildings. In 2015, the school population was 400 students from Preparatory to Year 6. Green Leaf ELC is a registered 75 place long day care centre offering education and care, including an approved kindergarten year, to children aged birth to 5 years. There are 21 staff members employed at the centre with varying qualifications – see Table 1.

The way the centre was set up gives an insight into a philosophy of excellence and acknowledgement of the natural environment. The logo design includes a dominant image of a tree which incorporates representations of the College’s four dimensions of learning – cultural, sporting, academic and relationships. Under the tree sits the relaxed form of a child reading a book. This acknowledges the value of education and care within a natural environment. This logo appears on the outside of the ECEC building, in the centre entrance, as well as on all centre documentation and website. The architects’ brief was to connect the building design to the
natural environment as much as possible. The centre has a large central atrium, timber waved ceiling, timber walled babies’ ‘cocoon’ room, and large open spaces attracting natural light. The colours of the building and furniture were chosen for their natural appearance.

While the staff, collectively, had a variety of previous experiences as educators in other settings, the inclusion of new foci on ECEfS and pedagogical leadership in the 2012 NQS, offered many challenges as the centre began its journey through the quality improvement process with staff having limited experience in these particular areas. This study has served to illustrate how a centre might meet and exceed the NQS even with limited contribution from past practices in a short time frame.

3.3 STUDY TIMELINE

The study was conducted over several visits to the case study site. The study timeline shown here in Table 3 illustrates how the study evolved.

<table>
<thead>
<tr>
<th>Action</th>
<th>Date</th>
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<tbody>
<tr>
<td>Permission obtained from case study site</td>
<td>June 2012</td>
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<tr>
<td>Ethics 1500000822 approval</td>
<td>26/11/15</td>
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<tr>
<td>Participant selection</td>
<td>30/11/15</td>
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<tr>
<td>Initial Director interview and document collection</td>
<td>30/11/15</td>
</tr>
<tr>
<td>Interviews of pedagogical leaders and educators</td>
<td>3/12/15</td>
</tr>
<tr>
<td>Interview transcription</td>
<td>January – February 2016</td>
</tr>
<tr>
<td>Data analysis</td>
<td>March – April 2016</td>
</tr>
<tr>
<td>Thesis completion</td>
<td>November 2017</td>
</tr>
</tbody>
</table>

Table 3: Study timeline

The table three identifies the study timeline. As shown the study site was visited on several occasions to establish permission, decide which participants to include and to collect initial documentation. The Director was interviewed to ascertain her views about the most effective way to conduct the interviews with least disturbance to children and educators.

3.4 PARTICIPANT SELECTION PROCESS

As identified in Chapter One, the key aim of this study was to illustrate how the ECEC leadership team understood and enacted quality ECEfS, and how they informed and supported all educators in relation to the NQS. Participants were chosen to best meet these aims. The participants were the leadership team at Green Leaf ELC comprising the Director (Bachelor of
Teaching Early Childhood) and the Educational Leader (Bachelor of Teaching Early Childhood) and three other educators (two with their Diploma of Early Childhood Education and one with a Certificate 3 in Early Childhood Education and working towards their Diploma) who participated in enacting ECEfS at the centre. They were chosen for their relevance in being able to contribute to answering the research questions that I set for this study. In effect, these were the leaders and educators who had the most influence on ECEfS in the centre. This was determined by directly asking the Director who had been, and potentially would be, the most influential educators and leaders in ECEfS at the centre.

The Director of Green Leaf ELC was responsible for the overall running of the centre except for the finances (the Green Leaf College took care of budgeting, paying wages, financial planning) and she was a key member of the leadership team at the centre. Many of the philosophies and policies were initially written by the Director as she was responsible for the start-up of the centre, however, a collaborative approach pervaded for subsequent review and revision of centre policy documents as the Director engaged all educators in the review process. The Director had an interest in sustainable practices and ECEfS prior to her appointment. Educators were employed by a panel with the Director having a strong influence on who was employed. The pseudonym Jodie was used for the Director.

The Educational Leader’s position entailed overseeing the pedagogy and sustainability practices within the centre and formed the second part of the leadership team. She organised pedagogical practices including the implementation of the NQS throughout the centre. The pseudonym Maddison was used for the Educational Leader.

The three other educators included in this research were either Lead Educators or Assistant Educators who implement ECEfS as part of the NQS but also took on some leadership roles in this process. Each had a special, yet varying, interest in ECEfS at the centre. For example, one Lead Educator had a special interest and action in ECEfS and became the Outdoor Educator at the centre in 2016. The other Lead Educator had been the sustainability champion in previous years. This educator championed and motivated the service toward ECEfS practices. The Assistant Educator had an interest in the natural environment and had been the sustainability champion in the previous year. The pseudonym’s Grace and Ashleigh were used for the Lead Educators respectively and Deb for the Assistant Educator.

As stated previously, the advantage of a case study approach is the close collaboration between the researcher and the participant (see section 3.6) while enabling participants to tell
their stories (Crabtree & Miller, 1999). As the number of participants was small, this allowed for more in-depth data to be gained.

3.5 DATA COLLECTION TECHNIQUES

As the timeline indicates, data were collected from October 2015 to December 2015 dating back to June 2013. A range of data collection techniques was employed for this study including interviews with the leadership team and educators, collection of centre documents, social media page entries, and photographs. Suryani (2008) outlines the steps involved in case study data collection stating that

Researchers collect all the raw data from interviews, observations or documents such as program files or reports, articles, and proposals. The next steps are organising, classifying and editing the raw data into an accessible file; also searching patterns from data related to the topic. Then the researcher formulates triangulation of observations and develops interpretation (p. 120).

The process of interview collection is detailed now.

3.5.1 Interviews

Interviews with five participants: the Director, Educational Leader, as well as three educators from the case study site were undertaken and were the main sources of data used in the study. These interviews were beneficial in order to deeply examine the leadership role within the NQS process. McNaughton, Rolfe and Siraj-Blatchford (2010) state that “interviews allow case study researchers to explore the meanings that lie behind observed behaviours or documentary evidence” (p.169) and that they allow interviewees to “have their own voice” (p. 334) to “gain different perspectives on the same issues as well as different layers of meaning” (p. 334). I followed the steps for interviewing described by Creswell (2013):

1. decide on the research questions,
2. identify interviewees, determine type of interview,
3. use adequate recording procedures,
4. design an interview protocol,
5. refine questions through pilot testing,
6. determine place of interviews,
7. gain consent and
8. use good interview procedures.

Creswell (2012) states that attitudinal data collection techniques “measure feelings towards educational topics” (p. 152). The pedagogical leadership team’s thoughts and feelings on their role in embedding quality ECEfS and how they were informed and supported through this process were noted.

Leaders and educators were interviewed to gain an insight into their experiences, beliefs and understanding of the role they were currently undertaking. Interviews allowed face-to-face conversations which provided rich insights into the experiences of participants and provided room for the participants to expand on points that were important to them (Robert-Holmes, 2005). The process for these interviews was similar to the practice of professional conversation which are becoming more commonplace in Australian ECEC as a form of communication and professional learning. Irvine and Price (2011) state that “the idea of a professional conversation in ECEC is to draw together early childhood educators to engage in a constructive dialogue on a topic of shared interest and importance” (p. 7). Educators may choose a topic of interest and explore it with deep thinking and conversation using theoretical and practical knowledge. Because the leadership team and educators at the case study site were cognisant of this process, the interviews included similar deep conversation between the researcher and participants.

Semi-structured interviews were based on responses to a set of themed questions (see Appendix A), with the opportunity for free expression at the end of the conversation. This allowed for deep thinking and focussed comments in the participants’ responses. McNaughton, Rolfe and Siraj-Blatchford (2010) note that it is important to avoid leading questions as they may constrain or bias the response. During the interviews, I was mindful of the need to avoid influencing participants’ views about leadership and embedding ECEfS at the centre.

The interviews for this study included fact-finding information relating to the educators’ understanding of ECEfS and how this was enacted. Other questions related to the pedagogical leadership team’s role, constraints and supports that occurred, how the role played out, approaches to leadership, challenges and opportunities, networking and professional learning opportunities. Educators were asked about how the pedagogical leaders informed and supported the process of continuous improvement toward the NQS and how they demonstrated their own leadership roles during this process (See Appendix A).

The interview questions were sent to the interviewees two weeks prior to the interviews being conducted so that they had time to think of responses and so the time for interviewing...
could be most efficiently utilised. The interviews were conducted over one day, each conversation lasting between 45 and 60 minutes. A relief staff member was employed for the day to cover each staff member as they were interviewed. This was done to respect that continuity of education and care for children is paramount in ECEC and to be cost effective in employing a relief staff member. Interviews were conducted in the centre office or in the atrium. They were audio recorded for later transcription, analysis and reflection by the researcher. There were also opportunities for each member of the leadership team to reflect on and examine the transcript data before they were analysed. Baxter and Jack (2008) stated that this gives the study credibility as participants clarify the researcher’s interpretation, and to contribute new or additional perspectives on the issue under study. In this study, email communication post-interview was carried out to expand or clarify information gained in the interviews. These emails did not change responses but added further detail, for example, about what initial leadership training the participants’ qualifications included, what their qualifications were called, and the external leadership experiences in which they were engaged. Ethical issues relating to interviews are discussed in section 3.7 of this chapter.

3.5.2 Centre documentation

Centre documentation was gathered and analysed for its relevance to demonstrating how educators understood and enacted ECEfS and how the pedagogical leadership informed and supported educators to embed quality ECEfS at the case study site. Documentation included an Assessment and Rating report, Quality Improvement Plan, centre policy, centre and Educational Leader philosophy, staff reflections and a questionnaire.

The centre philosophy (Appendix G), with reference to ECEfS in relation to children’s learning, was considered for its relevance to a vision of ECEfS. As Rodd (2006) has stated, leaders’ vision is seen as key in informing and supporting educators to implement ECEfS. Other relevant policies and procedures of the centre showed how ECEfS was supported and enacted in the centre. These included the past and present Quality Improvement Plan (QIP) (Appendix E) that showed the strengths and weaknesses identified by the centre prior to and since the Assessment and Rating in NQS 3.3 and 7.1, as well as its action plan aimed at directing towards quality ECEfS. The 2013 Assessment and Rating report (Appendix D) showed details of quality ECEfS and leadership practices and acknowledgement of improvements to be made. The Education Leader documentation relating to implementing the NQS, such as staff meeting notes (Appendices B and F), were also retrieved for analysis to illustrate how educators were informed about ECEfS.
The Educational Leader and another educator not involved in this study made entries in the Green Leaf ELC Facebook social media page (Figures 6 and 8). These entries were used as a data source to illustrate ECEfS pedagogical practices. Snelson (2016) stated that “social media research has been increasing over time and particularly for studies involving Facebook” (p.11). The entries used in the study were chosen because they relayed learning stories for children, families, staff and the wider centre community showing pedagogical practice in ECEfS in action. These entries also included illustrative photographs of children and adults participating in ECEfS.

Digital photographic images were taken by the researcher during the research process showing current pedagogical practices in ECEfS. Photographs were also included in the social media pages used in this study as mentioned above. As this was an historical case study, photographs used in this research also included those taken in the past showing the evolution of the centre’s physical structure. These were accessed through the school’s media officer. Harrison (2002) suggested that photographs can be seen as a form of storytelling, exploring narrative, and providing insight into memory and can be accessed from the present and the past. Harper (2002) added that images evoke deeper elements of human consciousness than do words. In Chapter Four, explanatory text is included with the photographic data, in line with Harper’s (2002) suggestion. This narrative explains the relevance of the photograph to the research questions. Ethical considerations for the taking of photographs are explained in section 3.6.

My role as researcher was to conduct interviews, view documents and social media page entries and take photographs. Table four below shows a timeline of documents collected from the case study site’s opening until the interviews were conducted, thus demonstrating a historical case study.

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</thead>
<tbody>
<tr>
<td>Green Leaf ELC opened</td>
<td>QIP V1</td>
<td>Assessment and Rating Report</td>
<td>QIP V 2</td>
<td>Philosophy</td>
<td>QIP</td>
<td>Caring for Environment (including animals) Policy</td>
<td>QIP</td>
<td>‘What does sustainability mean to us and what do we do already?’ staff survey</td>
<td>‘Our Commitment to Sustainability’ staff survey</td>
<td>Outdoor educator questionnaire</td>
<td>Interviews held at Green Leaf ELC</td>
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Table 4: Timeline of document collection

Although this is a relatively small study, depth of information gained from data collection is provided through thick description. Denzin (1989) describes thick description as going beyond
mere fact and surface appearances. He says it evokes emotions and injects history into experiences. He continues that it “establishes a sequence of events, includes voices, actions and meanings” (p.83). This study included details about how the Educational Leader’s role and the quality improvement process in ECEfS evolved over time. Thoughts and feelings of interviewees about current and future practices in ECEfS were captured. Different perspectives were gained through interviewing different educators and leaders as well as supporting documents.

3.6 DATA ANALYSIS TECHNIQUES

Data, including interviews, centre documents, social media page entries and photographs were subject to an in-depth analysis and coding process. Creswell (2012) stated that to “make sense of text data, divide it into text of image segments, label the segments with codes, examine codes for overlap and redundancy, and collapse these codes into broad themes” (p. 243).

This researcher analysed the data personally rather than using an electronic database analysis system due to the rich, qualitative information that could be gained, and because the volume of raw data was manageable. Merriam (2009) argued that humans are best suited to data analysis rather than relying on a computer program especially because interviewing and analysing are activities central to qualitative research.

The interviews were typed into verbatim transcripts. Thematic analysis was conducted using the six steps identified by Braun and Clark (2006): familiarisation with the data; generalising with initial codes; searching for themes; reviewing themes; refining and naming themes; and producing the report. Themed headings aligned to the research questions were used to analyse the data. Colour codes were applied to the transcripts then like data were collated under each heading. Further name codes derived from the interviewees’ names were added to ensure correct quotes were used.

The data were interpreted using an interpretivist framework to explore and gain insights into the perceived understanding of the participants. An interpretivist framework is defined as “a sociological research approach that seeks in-depth understanding of a topic or subject through observation or interaction; this approach is not based on hypothesis testing” (OpenStax College, 2012, n.p.). According to MacNaughton, Rolfe and Siraj-Blatchford (2005) “case studies look at particularisation; generalisation is not the aim – rather, the emphasis is on uniqueness and understanding. Therefore interpretation is the aim of case study” (p. 331). Rather than testing a preconceived hypothesis, the interpretivist approach includes deep description and narrative.
which allows for deep understanding and may evolve to optimise findings. Rowlands (2005) stated that interpretive research acknowledges the intimate relationship between the researcher and what is being explored, and the situational constraints shaping this process. For this study, the data were initially analysed according to the research questions; then, a second layer of analysis, using thematic analysis (Creswell, 2013) led to three themes and a number of sub themes being revealed. These themes are explained in detail in Chapter four.

3.7 ETHICAL CONSIDERATIONS

In line with QUT’s ethics requirements, informed consent was gained from participants in this study (Ethics Approval 15000000822). Permission was not needed for photographs as no children or adults were shown. Photographs of children and adults shown in social media page entries did not require permission as they were obtained from a public forum. I did however make the Director aware, as a courtesy, that the social media page would be used for this research.

This researcher has had a close personal and working relationship with the Green Leaf College, in which the case study site is situated, since 1998. This relationship was in the capacity of parent and past employee, Parents and Friends secretary, and reference group committee member. I knew of the Director and was involved in the original concept, building and playscape design, logo design and the philosophy formulation of the Green Lead ELC, so I had prior knowledge of their focus on the environment and the desire for excellence in educational practice. I was able to watch the building, literally grow from the ground up – from rubble to a fully functioning centre - along with the formation of the team of staff working in the centre. For these reasons, I already held the centre in high esteem prior to the data collection process. Currently, as a tertiary teacher in the vocational education sector in early childhood education, I supervise students on professional experience placements and I have undertaken my own employment requirement for industry release at this centre. This requirement involves spending five days in a year in an ECEC centre to assist with currency of vocational experience.

I chose the case study site specifically because I was known at the centre. Such a relationship provides advantages in data collection including understanding values, language, organisational structure as well as obtaining permission to conduct the research, to interview, and to get access to records (Coghlan, 2003; Herrmann, 1989; Rouney, 2005; Tedlock, 2000).

Disadvantages of such a pre-existing relationship could be overlooking certain routine behaviours, making assumptions about the meanings of events and not seeking clarification,
assuming the researcher knows participants’ views and issues and the closeness to the situation hindering the researcher from seeing all dimensions of the bigger picture while collecting the data. (Unluer 2012).

Drawing on these aspects of insider research I was mindful of both the advantages and disadvantages of a close relationship. I engaged in a process of continual critical reflection at each stage of the research. For example, during the data collection phase I used a variety of data collection methods, supported by more the objective evaluation of the centre’s quality through the NQS Assessment and Review processes.

The implications of this close relationship for this study are that I was able to gain detailed and complex responses to interview questions, and clear access to centre documentation. Gummesson (2003) suggested to make methodological choices that offer the best possible access to reality and which are best at making results that fit that reality. He continued that at its core, theoretical and purposeful sampling is about finding the cases that give a maximum of information. One disadvantage of this close relationship is that the anonymity of the centre may be compromised. To counter this, I used pseudonyms for the research participants, the centre and school, and I have been careful not to mention the location of my research to my students and colleagues. Another ethical consideration may be that the reporting of challenges for the centre may conflict with loyalties between the researcher and the centre. To counter this, I kept the centre informed of study findings as they came to hand and I was careful to represent findings accurately. Sikes (2004) states that researchers need to think about their influence and biases, and be reflexive and reflective at all stages of the research process. In order to have rigorous educational research, researcher positionality is important to disclose. If the researcher shows they are aware of their potential biases then they may be able to better control them or at least acknowledge them.

3.8 STUDY LIMITATIONS

3.8.1 Case study limitations

According to Yin (2003a), there are some limitations of a case study approach. First, people may think that case study researchers do not follow systematic procedures and may have biased views that may influence the study’s findings and conclusions. As suggested by Stake (2005), to avoid subjectivity and to increase the objectivity of data, a researcher should use triangulating methods. In this study triangulation of data occurred to ensure that the claims were supported
because multiple educators were interviewed and multiple supporting evidence was included. MacNaughton, Rolfe and Siraj-Blatchford (2010) state that “triangulation is a research practice of comparing and combining different forms, or different sources, of information in order to reach a better understanding of processes or perspectives” (p. 370).

A limitation of case studies is that they often rely on subjective data, such as the participants’ statements or the researchers’ observations, because most case studies focus on human experiences (Suryani, 2008). Consequently, data will vary based on the participants’ descriptions, opinions, and stated feelings. In this study, it was noted that there was a strong consistency of ideas expressed across the five interviewees such that while there were some unique responses, generally they confirmed each other’s statements and opinions as they discussed their understanding of quality ECEfS and how pedagogical leadership informed and supported them in this endeavour.

3.8.2 Limitations and opportunities of the context

Green Leaf Early Learning Centre is a stand-alone centre so the findings of this research were from one research site only. Findings, therefore, may or may not have relevance for other ECEC centres which may limit the usefulness of the study to those in similar centres. It should be noted that Merriam (2014) contends that case studies are stand alone and does not see this as a limitation.

The Green Leaf College is relatively financially successful allowing more resources, time and personnel for the smooth operation of the Green Leaf Early Learning Centre. This may allow the centre to meet requirements of the NQS more quickly than centres with a limited budget and fewer resources. Further, the school is in a natural setting with some environmental sustainability elements such as solar panels, underground water tanks, mini orchard and gardens and sensor lighting already present which may allow the centre to meet or exceed the NQS in the environmental dimension more easily than other centres.

The Green Leaf College in which the centre is located has a long standing belief in the value of the natural environment to children’s wellbeing and learning. They have had a Green Group that immerse themselves in various environmental activities within its student cohort for many years, perhaps giving this centre an advantage in meeting the 2012 NQS 3.3. The ethos in the surrounding college of environmental appreciation and activism is likely to have influenced what occurs in the early learning centre because sometimes their actions are visible from the centre or become known to those in the ELC. For example, many children from the ELC have...
siblings or friends involved in the Green Group at the school. Notwithstanding these ‘limitations’ the case study site offered important insights into pedagogical leadership that can inform and support educators toward quality ECEfS.

3.9 SUMMARY

This qualitative, historical case study involved exploring early childhood educators’ understandings of quality ECEfS and the leadership characteristics and actions in informing and supporting educators to embed quality ECEfS pedagogical practices as part of the 2012 NQS requirements in an Australian ECEC centre. Data were collected from sources such as interviews, documentation, social media page entries, and photographs. Through the prism of the research questions, the data were analysed then thematic analysis was used to discover how educators understood and enacted ECEfS, and how the pedagogical leaders informed and supported educators in this process.

Ethical considerations included the researcher’s close relationship with the school and the potential effects of this on the study. Study limitations and considerations of this research included the size of the case study, financial strength of the centre, and the natural environment in which the centre sits.

This methodological approach allowed the research questions to be answered with detailed accounts and illustrations about how educators understood and enacted ECEfS and how the pedagogical leadership team informed and supported educators in the NQS process toward quality ECEfS. The next chapter discusses the outcomes of this case study analysis.
Chapter Four: Data Analysis and Discussion

This chapter discusses a lengthy period of data collection at Green Leaf Early Learning Centre (ELC) in December 2015. These data included responses to interview questions with five leaders and/or educators from the centre as well as an analysis of documents (including reports, statements, and policy), social media entries, and photographs dating back to June 2013. The two research questions provided the framework for data analysis. These are reiterated below:

Research Question 1: This question is supported by the first two topics of the literature review ie. ECEfS and quality ECEC.

How is quality ECEfS understood and enacted at the Green Leaf ELC?

Research Question 2: This question is supported by the third topic in the literature review ie. pedagogical leadership in ECEC.

How did pedagogical leadership inform and support the implementation of quality ECEfS at the Green Leaf ELC?

These questions were established at the outset of this study to explore the links between pedagogical leadership in implementing and achieving quality ECEC pedagogical practices using ECEfS as the motif. The addition of the new position in 2012 of Educational Leader in ECEC centres in Australia as an indicator of quality in the NQS prompted this researcher’s interest in exploring how pedagogical leadership could contribute to quality ECEC, specifically in relation to ECEfS.

The two research questions were used to group the data findings into the following three themes and to structure this chapter. The data were organised by using the “research questions as a frame for analysis” approach to help “systemise the data” (Furseth and Everett, 2013, p. 122), and led to three key themes and a number of sub-themes as follows:

Theme 1: SPLE informing and supporting Early Childhood Education for Sustainability

- Vision of Early Childhood Education for Sustainability
- Positional and non-positional leadership informing Early Childhood Education for Sustainability
• Professional learning in informing educators about ECEfS
• Organisation and governance
• Ethical leadership
• Mentoring and providing a supportive environment for educators
• Supportive remuneration

Theme 2: Educator Understandings of Early Childhood Education for Sustainability

• Understandings of Early Childhood Education for Sustainability from the leaders’ perspectives
• Educators’ understandings of Early Childhood Education for Sustainability
• Documents indicating understandings of Early Childhood Education for Sustainability
• Photographs demonstrating understandings of Early Childhood Education for Sustainability
• Professional Learning toward building understandings of Early Childhood Education for Sustainability
• Early Childhood Education for Sustainability in Practice

Theme 3: Quality Early Childhood Education for Sustainability

• Definition of Quality
• Types of quality
  Structural
  o Change Process Engagement
  o Curriculum frameworks and guidelines
  o Stimulating learning environment
  o Educators’ supportive environment
  o Professional learning toward quality ECEC
  Process
  o Educator-child relationships as an indicator of process quality
  o Hearing children’s voices for sustainability
  o Inclusive social justice practices for process quality
  o Sustainability-related curriculum content
  o Specific quality improvement processes for ECEfS

As already noted, the interviewees included the positional leadership team of the Green Leaf ELC, being the Director who oversaw the entire centre operation, and the Educational
Leader who mentored staff in curriculum development as well as seeing to the implementation of ECEfS. The three other staff were either Lead or Assistant Educators who were each responsible for one group of children as well as implemented ECEfS in the centre.

The following sections present the data analysis findings from the interviews as well as from the other data sources and are grouped under the themed headings outlined above.

Answering research question two is the first theme of the data analysis.

4.1 THEME 1 SUSTAINABLE PEDAGOGICAL LEADERSHIP INFORMING AND SUPPORTING EARLY CHILDHOOD EDUCATION FOR SUSTAINABILITY

The most important theme to emerge from this study relates to SPLE and this section discusses in detail the elements that make up this notion of SPLE.

SPLE supported educators to engage with sustainability across all its dimensions - environmental, social, economic and political. The sustainable pedagogical leadership practices so identified through this study revealed a range of ethical and inspiring practices. These included working toward a clear vision, engaging with educators through mentoring and critical reflection and empowering educators with rich and varied professional learning opportunities. Educators were provided with distributed leadership opportunities, encouraged to have a voice, and this contributed to an inclusive organisational culture.

From this analysis of data, formulated from the second research question, effective leadership informing educators about ECEfS pedagogical practices was shown. The specific elements derived from the data are: the vision of ECEfS for the centre; positional and non-positional leadership informing ECEfS; and the role of professional learning at Green Leaf ELC.

4.1.1 Vision for Early Childhood Education for Sustainability

The sustainable pedagogical leadership demonstrated at Green Leaf ELC shows that leaders strive toward a vision and lead others on this journey (Bennis, 1989; Rodd, 2102; Siraj-Blatchford & Manni, 2007). A centre’s philosophy statement is an indicator of the vision of the centre that informs educators in implementing ECEfS. In this study, the leadership team used the document to guide staff towards the ideals contained within (Appendix G). The Green Leaf ELC philosophy was originally formulated by collaboration between Jodie (Centre Director), the Green Leaf College Principal and the staff member responsible for Green Leaf College
Pastoral Care. The philosophy document stated that Green Leaf ELC will “create an environment for the children that embraces sustainability and to remind children often on the importance of our Earth and how to care for it” reflecting links to environmental sustainability. Ashleigh (Lead Educator) showed how this could look in practice when she talked about how the centre encouraged worms in their garden. To do this they used Polythene pipes, put in a hole, fill up with food and put a lid on it and the worms come from underneath. It’s amazing because they used to be full of scraps and it would all break down and we had worms where we had no worms before. We found out the worms in the garden are different to worms in the compost. They’re a different species. If you put them in the worm farm they will move away. (Transcript 3/12/15)

Other statements in this document refer to broader areas of sustainability, other than environmental, such as social sustainability. The following statement from the document offers one example, stating that a key aim of the centre’s philosophy is “to respect that children learn most effectively when they feel positive about themselves, this is achieved by acknowledging children’s strengths, showing love and having positive interactions with children”. Positive relationships encourage learning in all areas of the curriculum. The ECEC curriculum framework, the EYLF, states that “educators’ practices and the relationships they form with children and families have a significant effect on children’s involvement and success in learning” (DET, 2009, p. 9).

The Educational Leader at the centre also had a vision statement for her position (Appendix I) which helped inform the educators about ECEIS. This document stated that Maddison’s role was to support educators in their roles, encourage reflective practice, guide current practice, be available to educators, role model appropriate interactions and programming methods, engage in professional learning and share findings, interesting facts and current practice. It outlined communication methods to be used and included a calendar for topics to be covered each month in the year. Maddison illustrated how this would look in practice when she stated that We have opportunities to have meetings with each other. I have fortnightly meetings with everyone as Educational Leader whether it’s at morning tea or in the staff room, we also do team meeting with staff in our rooms, we are given time for that. Kylie often assigns me as mentor for new staff or staff that need some form further development in a particular area, not in a formal capacity but just if they come and ask me a question I help them when they need it. (Transcript, 3/12/15)
Siraj-Blatchford and Manni (2007) found that in the most effective settings better leadership was characterised by a clear vision, especially with regard to pedagogy and curriculum.

Through these philosophy statements, the Green Leaf ELC leadership team informed and engaged the educators, parents and wider community about its vision for ECEfS.

4.1.2 Positional and non-positional leadership informing Early Childhood Education for Sustainability

Being informed about ECEfS can occur via the leadership team or from within the team of educators at Green Leaf ELC. Jodie (Director) stated that she engaged staff by

Professional conversations at staff meetings. I will email interesting things to them they can read at their own leisure, I think if I’m interested in it then they are and that’s the whole part of being an effective leader you have to have interests in a lot of things, or if you are not interested do it until you are, you can’t be interested in everything. I still have to initiate and I am interested in a lot of things. You have to be in this job (Transcript, 3/12/15)

Here, Jodie (Director) showed how she led by her own enthusiasm and interest thus encouraging those around her to follow. This is a trait of transformational leaders who have the ability to inspire and motivate followers (Bass & Riggio, 2006). In a recent study of pedagogical leadership in ECEC “experience and capacity were seen as somewhat more important than either qualifications or interest in the role” (Fleet, Soper, Semann & Madden, 2015).

Maddison (Educational Leader) informed educators by encouraging their ideas in the program, guiding rather than telling them what to do. She stated

I never had the view that I was going to tell them what to do. I’ve never done program checks. Jodie does that. We developed a vision statement at the start for my role as Educational Leader. When I first started it was about setting everything up, now it’s more about providing support that they need. We’ve got very confident staff. Sometimes I feel like I don’t help them but Jodie reassures me and says ‘well you do’. ‘You’ve done this and this and this’. (Transcript, 3/12/15)

Although Maddison was a positional leader at the centre she provided support for competent educators rather than managing their actions, suggesting they were showing some leadership in their non-positional roles. Non-positional roles mean that their work role is not a
designated leadership position such as the Educational Leader or Director of the centre. Maddison alluded to the growing expertise of the educational team at Green Leaf ELC as she challenged followers to be innovative and creative, leading to a higher level of performance which was another example of positional transformational leadership (Bass & Riggio, 2006).

Analysis of data in this study suggested that the leadership informing ECEfS was also non-positional in nature. Lead Educator, Ashleigh, stated “I am an active leader. I lead by example and inspire others. If they see me doing something sometimes they become interested and want to help and get involved” (Transcript 3/12/15) showing how her actions may inspire others to action. Lead Educator, Grace, said “I help educate educators who don’t have experience” (Transcript, 3/12/15) with ECEfS pedagogical practices showing non-positional leadership in mentoring other colleagues. This concurs with various researchers who also emphasise that leadership can be non-positional in the centre (Ciulla, 1998; Lewis & Hill, 2012; Waniganayake & Semann, 2011).

As evidence of the centre’s commitment to ECEfS a new position called the Outdoor Educator was created in 2016 which was filled from within the educator team. Jodie (Director) stated that “next year we are having an Outdoor Educator. She’s pretty excited about it” (Transcript, 3/12/15) who will lead ECEfS at the centre. This is an example of non-positional distributed leadership which acknowledges that all ECEC educators have a sound knowledge base or expertise in educational pedagogy (Jones & Pound, 2008). Appendix H shows how the leadership team incorporated ideas from the educator team about what the new Outdoor Educator position might entail as an example of distributed leadership.

4.1.3 Professional learning in informing educators about ECEfS

The provision of or access to professional learning is a key aspect of pedagogical leadership informing educators about ECEfS (Elliott & McCrea, 2016). The educators at Green Leaf ELC were provided professional learning opportunities externally and internally to the centre.

All of the educators including the Director had been to specific professional learning workshops relating to ECEfS. In some cases long term and multiple professional learning opportunities were given. Lead Educator, Grace, discussed different types of professional learning, for example, staff meeting discussions, attending meetings together, educational leader conversations, helping to get children involved and the centre allowing computer access encouraging research. Grace stated that “PD is ongoing. I am currently attending a PD with the
Workforce Council run by Sue Ingliss together with Jodie. The action research question is about teaching others about the importance of sustainability and natural environment” (Transcript, 3/12/15). Maddison (Educational Leader) travelled interstate to attend a professional learning session which included a tour of centres stating, “We went to Melbourne to do a PD too” (Transcript, 3/12/15) and had since been engaged in the provision of training to other educators. Maddison stated “I’ve even been in the leadership role. I’ve presented webinars and workshops for KASS (Kindergarten Advisory Support Centre). They support kindergartens in long day care settings. I’ve done workshops all over Queensland on play based learning environments” (Transcript 3/12/15). This is an example of collaborative leadership as Maddison worked with another organisation to share her knowledge.

Professional learning occurred ‘in-house’ at the centre around topics of ECEfS. Maddison (Educational Leader) and Deb (Assistant Educator) confirmed that Jodie (Director) passed research articles on to the staff. Deb (Assistant Educator) stated that “Jodie leaves articles on the staff table, magazines open on a page or in the loo” (Transcript, 3/12/15). These “individualised approaches to professional learning are more likely to promote constructivist learning because theory and personal experiences are linked in an atmosphere of trust and respect between learner and mentor” (Brownlee, Berthelsen & Segaran, 2007, p. 19).

4.1.4 Organisation and governance

The sustainable pedagogical leadership approach of the team at Green Leaf ELC brings organisation and adherence to governance which supports educators to implement ECEfS. Adherence to the National Quality Standard and continuous improvement is ongoing at the Green Leaf ELC. The process of continuous improvement supports educators to embrace ECEfS principles as they strive to develop good quality pedagogical practices over time by providing targets, guidelines and timeframes. The Guide to the NQS shows in Element 7.1.1 that “Appropriate governance arrangements are in place to manage the centre” (ACECQA, 2013, p. 163) as an indicator of quality ECEC. Data collected to demonstrate governance in the area of quality improvement are the Quality Improvement Plan (Appendix E) and the Assessment and Rating report (Appendix D) that shows an overall exceeding rating for Green Leaf ELC.

Further data that supported the notion that the centre’s organisation and governance were effective was the centre’s philosophy statement (see Appendix G) that was reflected in all
aspects of the centre’s operation including their policies such as the Caring for the Environment Policy (Appendix C).

4.1.5 Ethical leadership

Ethical leadership is another key aspect of sustainable pedagogical leadership that supports educators in ECEfS. Leaders act ethically in their leadership role which in turn encourages other educators to behave in the same way in their role (ECA Code of Ethics, 2016; Rodd, 2006; Siraj-Blatchford & Manni, 2007).

The ECA (2016) Code of Ethics embraces the values and processes considered central to ethical behaviour in an ECEC setting. These include respect, democracy, honesty, integrity, justice, courage, inclusivity, social and cultural responsiveness and education (ECA, 2016; Waniganayake & Semann, 2011).

The values of respect and courage are evident in the data collected from Green Leaf ELC. Respect for the views and input of others is a democratic style of ethical leadership first described by Lewin, Lippit and White in 1939. When the Outdoor Educator position was filled, Maddison (Educational Leader) surveyed the educators about how they envisaged the role which was then shared with the Outdoor Educator in preparation for the commencement of the role in 2016 (Appendix H). This showed that the views and input of the staff were valued. Working well with colleagues and “having skills to work in teams in order to build a culture of reflection and improvement was seen as a priority” (Campbell-Evans, Stamopolous & Maloney, 2014, p. 44).

A number of the participants at Green Leaf ELC alluded to the importance of ethical leadership as demonstrated in a democratic approach. Maddison (Educational Leader) described democratic leadership when she said

I don’t go out and say I want you to do this. I’ll ask them what they think it should be and from there they take their own way of looking at it. Yes we have our gardens and compost bins but I don’t tell them what to put in it or how to do it. Everyone’s got different ways of doing things (Transcript, 3/12/16).

Empowering educators by supporting their input into programmes gives them confidence to take on ECEfS projects and practices with children.

In regard to having courage, Jodie advocated for risky play to continue to the regulatory authority after two children sustained minor bruises due to self-inflicted rock injuries. The activity had been carefully assessed for risk and then reassessed. Jodie stated
“these things are just going to happen. I’m not taking the rocks out of here or the sticks….we do have riskier play and we support and encourage that” (Transcript, 3/12/15). Another example of Jodie’s advocacy was communicating with the School Board about the need for using recycled materials as part of ECEfS when the aesthetics of a brand new centre was seen as desireable. This courageous advocacy allowed children to experience natural and recycled materials as part of ECEfS learning and demonstrated to the educators that the leadership would support, through advocacy, educators to implement valuable ECEfS pedagogical practices.

As noted, ethical approaches of the centre leaders may encourage other educators to do the same. Maddison (Educational Leader) stated that

Jodie’s still our overseer but she works alongside us not tells us what to do. I don’t think I tell them what to do I work alongside them. I’m there if they need and it’s usually something really simple that they just need a bit of support with. (Transcript 3/12/15)

This shows that Maddison may be using Jodie’s democratic leadership style on which to base her own. “The result of ethical leadership is that educators respect the work of the leader and in turn work ethically themselves” (Rodd, 2006). The practice of ethical leadership allowed educators to participate in knowledge gathering about ECEfS. Rather than a teacher/tutor relationship between the leadership team and the educators, a more democratic process was taking place. In this way educators were confident and supported to research and implement ECEfS pedagogical practices.

4.1.6 Mentoring and providing a supportive environment for educators

The Green Leaf ELC leadership supported educators through mentoring using informal and formal interactions. An example of informal support was explained by Ashleigh (Assistant Educator) when she stated that “Jodie leaves articles on staff table, magazines open on page or in the loo” (Transcript 3/12/15).

Maddison (Educational Leader) cited a more formal support style when she said

Jodie does a lot of team building things at staff meetings. Recently we talked about ‘What makes your job hard?’ and from that we have learnt how to support each other better. It’s a way to look out for each other and build morale between each other. We have opportunities to have meetings with each other. (Transcript, 3/12/15)
As shown above in Maddison’s (Educational Leader) statement the staff feel a sense of belonging to Green Leaf ELC which added to the positive organisational climate found at the centre.

A sense of belonging for staff at work is likely to occur when staff feel valued for the work they do; are respected and accepted; have positive relationships; and are in a safe environment. Additionally, belonging is increased when people feel their work is meaningful and when they share similarities with the people with whom they work and the culture of the workplace (Hazel, Kemp, Newman & Twohill, 2011, p. 8).

Leaders must first inspire themselves before they can inspire others (Rodd, 2006). Jodie (Director), illustrated this when she stated

I think if I’m interested in it then they are and that’s the whole part of being an effective leader you have to have interests in a lot of things, or if you are not interested do it until you are. (Transcript, 3/12/15)

In this interview excerpt, Jodie showed traits of transformational leaders who embrace inspirational motivation and have the ability to imbue and motivate followers adding to their charisma (Bass & Riggio, 2006). This set up a supportive organisational climate at the centre where educators were enthused through the motivation of the leaders.

All interviewees alluded to strong support within the team as a major factor in the success of their programs, staff employment longevity and satisfaction, which in turn supported the successful implementation of ECEfS at the centre. Jodie (Director) explained her method of support is to “let them go, have chats with them, see what they’ve been doing, provide resources, ask what they need” (Transcript, 3/12/15). Response Ability, an initiative of the Australian Government Department of Health who aims to promote the social and emotional wellbeing and mental health of children, advocates for staff to create a sense of belonging by

creating positive relationships with other staff members, making each other feel valued by acknowledging efforts and achievements, acknowledging that everyone is unique (embracing diversity—including culture, values and beliefs—without prejudgement or stereotypes), creating a workplace reflecting equality, where everyone can feel free to voice their ideas and views, being empathetic and inclusive (Hazel, Kemp, Newman & Twohill, 2011, p. 8).

Jodie’s (Director) leadership reflects a supportive ethos which leads to a sense of belonging at the centre for the educators. The following is a lengthy quote from Jodie but the
detail highlights the depth of attention paid to educators needs and may be a critical factor leading to success of Green Leaf ELC in the NQS Assessment and Rating process. She expounds the value of supporting educators when she states

I listen and respond. I am sympathetic, empathic to flexible working arrangements that suit their families. Some want early, some want late shifts and it works. Somehow it comes together. I don’t react; it takes a lot for me to react. I’m pretty calm and even, pretty much all of the time. I don’t worry about something until something happens because worry is a wasted emotion. My mood goes to them. I learnt that a long time ago. If I’m worried or stressed or frantic about something then I notice all of them as well… just being calm and stable. Not authoritarian. If something is not right I will say something but I think first about how to say it. Correct tone, how to approach the person. Different people require a different approach. Learn about who they are - asking about them, know about them. You look after staff. They are my best resource so by having a priority on educators then flows on to everyone else. I see them as number one. I give them shifts they want. Birthdays are acknowledged. Social events - we’ve climbed mountains, Coffee Club, bushwalking, Miss Muddy, coming together as a team outside of here, staff Christmas party that I pay for, child care wages are pretty low so have to subside and show appreciation, Educators Day I splash out and cater for the occasion, on our anniversary we celebrate, morning teas, I bring in something regularly like biscuits and dip or something homemade, like I’ve got time (laughing), they are paid above award wages, they get a new uniform each year, all PD and first aid is paid for, appreciation notes, emails saying thank you, you did this today and I really like the way you did that because…, the full story, leave them little notes, notice when they are not themselves and ask what’s up - it’s part of my job (Transcript, 3/12/15).

Here Jodie has encompassed the social and economic needs of the educators with her commitment to the wellbeing of the team at the centre and reflects the post-modern view of Nicholson and Maniates (2016) who state that ECEC pedagogical leadership can be relational and emotional.

4.1.7 Supportive remuneration

Remuneration in the form of money and programming time was another way that the leadership team showed support for educators which in turn supported their work in ECEfS. Maddison (Educational Leader) talked about remuneration and the resulting benefits to the centre’s business by stating
I’m an ECT and I get all the school holidays off paid for. I’m looked after but they’re investing in that and over time that’s sustainable for the business. We have very low turnover of staff. If only everyone knew that secret! (Transcript, 3/12/15)

This results in a stable staff who can build on practices over time in a cycle of continuous improvement. A recent study of pedagogical leadership found the majority of respondents reported that they did not have a budget to assist them to carry out the role, nor was there supplementary pay for taking on the role of the Educational Leader (Fleet et al., 2015).

Maddison (Educational Leader) also cited programming time as a support for staff.

All our assistants are given programming time as well as the other staff so we recently negotiated. It depends on how many children you have enrolled in your group. Some staff have 3 – 3.5 hours that’s the group leaders, assistants have 1 – 1.5 hours. If you’re going to invest in it you get it back. We’re full and we’re just expanding. We’re putting on more staff next year as we are increasing numbers in rooms and having another kindy class. In the long run it’s a sustainable business. (Transcript, 3/12/15)

The leadership team at Green Leaf ELC supported ECEfS by maintaining the social relationships of the educators at the centre through social team building events and support for their personal needs. The leadership team had an eclectic mix of interests at the centre which inspired the educators. Educators were further supported with good working conditions including remuneration of above award wages and time for programming for all educators regardless of position at the centre.

4.1.8 Summary comment on leadership at Green Leaf ELC

Respondents to the interview questions reiterated throughout that the leadership team of the Green Leaf ELC was responsible for the success of the program and the centre. As presented in the literature review in Chapter Two of this thesis four types of leadership congruent with the ECEC field were offered: distributed, collaborative, transformational and catalytic leadership.

Distributed leadership is common in ECEC where tasks are delegated and shared among people (Pearce & Sims, 2001) involving a culture of trust and respect. Jodie demonstrated this when she empowered others to take on ECEfS in the centre. For example the position of an Outdoor Educator, was created utilising the interest and knowledge of an educator at the centre.
Ebbeck and Waniganayake (2004), state that distributed leadership is based on valuing knowledge or expertise in diverse spheres of activity including curriculum, advocacy, personnel and community. Jodie (Director) and Maddison (Educational Leader) were both involved in further professional learning and both then went on to present information in the wider educational community (collaborative leadership). Jodie showed advanced skills in dealing with the personnel of the centre as evidenced in the above sections and was able to advocate for continual improvement at the centre leading to higher order pedagogical practices such as creating an Outdoor Educator position, risky play and a future bush kindergarten program.

Distributed leadership results in staff motivation and increased inspiration which contributes to continuous improvement of practices within the centre (Rodd, 2013). The centre staff were continually improving and evolving in the area of ECEfS with the addition of ECEfS in the four dimensions of sustainability illustrated in photographic evidence (Figure 6).

Collaborative leadership is another common form of leadership in ECEC and it involves working together both internally and externally to the centre (Rubin, 2009). This was in evidence at Green Leaf ELC as they participated in external work including liaising with other ECEC centres in the local area, community agencies, and commercial organisations or beyond using technology. In similarity to distributed leadership, internal work includes all staff having a genuine input into decisions and contributing to the culture of the centre (Rodd, 2006).

Bass and Riggio (2006) proffered four components to transformational leadership. These are:

- Idealised influence where the leader is a role model and is admired for working alongside other educators;
- Inspirational motivation where the leader has the ability to inspire and motivate followers adding to their charisma;
- Individualised consideration where leaders demonstrate genuine concern for the needs and feelings of followers thus bringing out their best efforts; and
- Intellectual stimulation where the leader challenges followers to be innovative and creative leading to a higher level of performance (n.p.).

These points were illustrated as Jodie and Maddison, the leadership team at Green Leaf ELC, were role models for staff as they worked alongside them in professional learning and pedagogical practices. Educators interviewed spoke of leaders motivating and inspiring them.
Empathetic leadership was evidenced in Jodie’s (Director) and Maddison’s (Educational Leader) interview responses. This may have led to a higher level performance as shown in the NQS Assessment and Rating result of ‘exceeding’.

Catalytic leaders, like transformational leaders, are agents of change and a key force in motivating educators towards continuous improvement with their infectious positive energy rousing others to strive for higher quality meaning and practices. Catalytic leaders are ground-breakers with high levels of credibility within and, as a point of difference to transformational leadership, outside the teaching profession (Silcox & MacNeill, 2003). The leadership team at Green Leaf ELC was beginning to move outside the centre to other areas such as hosting events that other ECEC centres attended, speaking at kindergarten advisory meetings and becoming panel members for industry conferences. So far these had been within the wider education community. In time, their practices may be shared outside the education profession.

The leadership team of Green Leaf ELC showed evidence of pedagogical leadership being multiple, dynamic, relational, emotional as well as cognitive, opening up the opportunity for educators to think more broadly through reflection and therefore action in ECEfS. The four dimensions of sustainability – environmental, social, economic and political – were in evidence throughout. In summary, the pedagogical leaders of the case study site showed evidence of aspects of all four leadership types mentioned above that in combination, this researcher has defined as Sustainable Pedagogical Leadership in ECEC or SPLE.

The second theme identified in the data collection answered research question one.

4.2 THEME 2: EDUCATOR UNDERSTANDINGS OF EARLY CHILDHOOD EDUCATION FOR SUSTAINABILITY

As explained in Chapter Two, ECEfS should occur in an holistic way in early childhood contexts encompassing the environmental, political, economic, and social dimensions of sustainability (ARIES, n.d. and UNESCO n.d.). The synthesis of Education for Sustainability and Early Childhood Education and Care is ECEfS (Davis, 2009). ECEfS can be described as a transformative, empowering and participative approach to ECEC (Davis, 2010b). It includes engagement with sustainability issues, topics and experiences within early childhood settings and is about enriching such experiences and building on young children’s knowledge, dispositions and skills to ‘make a difference’ now and for the future (adapted from Davis, 2010b) so that options for future generations are not compromised.
4.2.1 Understandings of Early Childhood Education for Sustainability from the leaders’ perspectives

To gain an insight into interviewee’s definition of ECEfS the pedagogical leaders and educators were asked about their understanding. Responses to the interview question about defining ECEfS varied among educators in this study. The leadership team of the centre, that is, the Director, Jodie (pseudonym), and the Educational Leader, Maddison (pseudonym), articulated the broad understanding of sustainability, such that they included environmental sustainability as well as the three other dimensions of sustainability: social, economic and political (Kates et al., 2005; Munasinghe et al., 2003; Robinson & Herbert, 2001) in their discussions. Jodie (Director), for example, stated that ECEfS

Means a lot of things – the environment we are in, how sustainable is the building, how sustainable are the educators within the room and what our practices are, educating the children on sustainability…it’s all linked, we look after the plants and care for animals, how we look after each other, how we need water, if we’re not feeling well or if we are tired looking after our bodies then looking after the earth, the ground, the vegie gardens, if there’s rubbish we pick it up if we don’t it will go into the ocean and the turtles will eat it and they’ll die. The whole cycle. (Transcript, 3/12/15)

Here Jodie (Director) was alluding to environmental (looking after the natural environment such as the earth, animals and the earth), social (looking after bodies to maintain optimal health) and economic (a sustainable building runs more efficiently so costs are less) sustainability and ECEfS (educating the children about sustainability). Another research participant, Maddison (Educational Leader), emphasised that ECEfS includes teaching and working with children by stating that ECEfS is “educating children about our world and how to care for it but not always intentionally, just doing it through daily practices and procedures and having communication with them” (Transcript, 3/12/15). Both leaders showed a broad understanding of ECEfS.

4.2.2 Educators’ understandings of Early Childhood Education for Sustainability

Suggesting a narrower definition of sustainability, the educators not in positional leadership roles at the centre focussed mainly on environmental sustainability in their interviews. Lead Educator, Grace, for example stated that ECEfS is “looking after the environment, and how to use resources to do that” (Transcript, 3/12/15) concentrating on only the environmental sustainability dimension.
This ‘environmental’ focus was also found to be pervasive in the centre documents which were included in the case study data. For example, the Green Leaf ELC document “What does sustainability mean to us? What do we do already” (Appendix B) was a question, written on a sheet of paper and placed on the staff room table, that the educators responded to as part of ongoing professional reflection. Written responses by the educators at the centre showed reference only to environmental sustainability examples, such as “Think of the uses before throwing out” and “Using scrunched up/cut up plastic bags in craft”.

How educators define sustainability and ECEfS is likely to translate into the practices they initiate and maintain at the centre. Assistant Educator, Deb, listed only environmental sustainability ideas when asked to define sustainability, for example “helping to look after environment, teaching children and educating children, recycling, no nude food yet maybe next year, lids and yoghurt containers children wash craft, glue pots themselves, creative bin” (Transcript, 3/12/15). Research about this narrower view of sustainability “adds to a growing body of literature that points to beginning teachers in a range of educational contexts having limited understandings of sustainability and EfS which primarily evoke an environmental bias” (Læssøe, Schnack, Breiting, Rolls, Feinstein & Goh, 2009). Although Deb (Assistant Educator) was not a beginning teacher, she reported that her initial vocational training did not include the study of sustainability or ECEfS. Hence this may contribute to her lack of acknowledgement of the broader dimensions of sustainability.

4.2.3 Documents indicating understandings of Early Childhood Education for Sustainability

The Green Leaf ELC did not have a Sustainability policy, per se, that included the four dimensions of sustainability but rather had a ‘Caring for the Environment’ policy which emphasised the environmental dimension of sustainability (Appendix C). Meanwhile, the Centre Philosophy statement (Appendix G) did include a specific statement about children caring for the environment, thus the social/political dimension of sustainability was alluded to. The documents “What does sustainability mean to us” (Appendix B) and “Our commitment to sustainability” (Appendix F) also included educators’ responses developed through professional learning activities at the centre which, however, only mentioned the environmental dimension of sustainability. With only quality area three of the NQS addressing environmental sustainability this understanding of sustainability was a reflection of the current ECEC field (Davis & Elliott, 2014).
Thus, documents collected in this study indicated a strong emphasis on the environmental dimension of sustainability.

4.2.4 Photographs demonstrating understandings of Early Childhood Education for Sustainability
Photographs taken by this researcher as part of the data collection for this study showed a wide range of sustainability practices being enacted in the centre that were being implemented by both educators and children. These exemplified a broader application of ECEfS than many of the educators’ responses and documents suggest. In fact, they showed examples of all four sustainability dimensions at work.

Photograph 1, for example, shows a display about culture and belonging at the centre as an example of social sustainability. Photograph 2 illustrates an environmental sustainability example as the adoption of zoo animals ensures their survival and breeding a new generation. Photograph 3 shows reused bottles as paint pots rather than buying new pots as an example of economic sustainability. Photograph 4 shows the Assessment and Rating report as an example of governance and political sustainability being enacted at the centre. Indeed, this Assessment and Rating report (Appendix D) shows how the Green Leaf ELC was able to exceed the NQS.
4.2.5 Professional Learning toward building understandings of Early Childhood Education for Sustainability

Targeted professional learning is one way of expanding educators’ understandings and actions in ECEfS so that understandings and definitions of sustainability can extend beyond the environmental dimension. The educator who offered the previous quote focussing only on the environmental dimension of sustainability, Deb (Assistant Educator), stated that she “went to a PD on sustainability” and concluded that “it’s about the children being good citizens for the future” (Transcript, 3/12/15). This comment suggested that she was developing a broader perspective of ECEfS as a result of this professional learning. Samuelsson and Kaga (2008) stated that the provision of high-quality training is a policy priority that empowers educators and should be included in both preservice and on the job training. Section 4.3.3 further expands the discussion in relation to professional learning.

4.2.6 Early Childhood Education for Sustainability in Practice

As was illustrated in the diagram (Figure 3) shown in Chapter Two, ECEfS can be seen as an interrelationship between pedagogy i.e. curriculum, teaching and learning, people, i.e. partnerships and community, and place i.e. environment and ethos (Davis, 2010b). Using this framework to analyse and discuss the data, educators were able to show their understanding of ECEfS through the curriculum that is applied through their intentional teaching as well as honouring the children’s voice, partnerships with families and the input from the broader community.

An example of the interrelationship between pedagogy, people and place where educators demonstrate their understanding of ECEfS is seen in ‘The Concreters’ learning story taken from the centre’s social media page.
“Today we became concreters! Following on from an interest a child has with concreting the kindy group made their own pavers. They mixed the cement up, poured it in to the box and decorated it with colourful stones. Tomorrow we will see how good Miss Maddison is at concreting! lol - any of you who are concreters please don’t comment on all the mistakes we made!

Figure 7: Social media entry “The Concreters”

Cooke’s (2010) Pedagogy, Place, People diagram in Section 2.1.7 representing ECEfS can be applied to ‘The Concreters’ story. ECEfS curriculum, teaching and learning occurred when the method of formwork, ingredients for concrete, and actions for mixing and smoothing were topics of learning. The application of environment and ethos of place occurred when the eductors and children used natural materials found around the centre for their learning project. Partnerships and community principles were evident when the original idea came from a child whose house was being built and further ideas were gleaned from his parents to assist the project. Jodie (Director) said that “the child showed interest in concreting as they had recently built a home. The parents were questioned about it and were happy to give other suggestions on what else he likes to do” (Transcript, 3/12/15). Harris and Manatakis’s (2013) Australian study of children’s voice highlights the valuable input of children into their learning. Many of the suggestions children made in their project related closely to ‘The Concreters’ story above such as their desire to connect with and preserve the natural environment, the inclusion of engaging built environments, spending time with families, friends and people, the importance of time for engaging play and activities, changes for a better future and communication where young children can demonstrate their opinions.
This learning story illustrates that many of the centre practices and responses by the leaders and educators supported not only the environmental dimensions of sustainability but also other three dimensions of sustainability. As noted, sustainability includes the environmental, social, economic and political dimensions and involves the interrelationship between pedagogy, people and place. Understanding sustainability and ECEfS depends on the individual educator, their teacher education both pre-service and in-service, their interest and ongoing professional learning. While there was clear evidence that the environmental dimension was emphasised at Green Leaf ELC, children taking action and families having a voice in sustainability actions were also observed in the pedagogical practices at the centre.

Ensuring pedagogical practice represents the broad definition of sustainability allows ECEfS to extend to reach the full potential of learning for children. This can lead to all areas of the curriculum being explored and quality embedded ECEfS occurring across the curriculum. Quality is an important aspect of ECEfS that was explored in Chapter Two of this thesis. The next section analyses the data from this study in relation to quality embedded ECEfS in detail.

The third theme that was identified in the data also answered research question one.

4.3 THEME 3: QUALITY EARLY CHILDHOOD EDUCATION FOR SUSTAINABILITY

This section presents data evidencing quality embedded ECEfS pedagogical practices at Green Leaf ELC. This is the third theme of this study derived from research question one about how ECEfS is enacted at the service.

First there is a reminder of the definition of quality ECEC which is then illustrated by selected excerpts from the interviews. The notions of structural and process quality (concepts introduced in Chapter Two) are examined in terms of the findings from the data analysis. Finally, the outcomes of a quality ECEfS program are explained in terms of how aspiration for quality has informed ECEfS at the centre.

4.3.1 Definition of quality in Early Childhood Education are Care

The Guide to the 2012 NQS provides a definition of quality ECEC in their guiding principles, stating that

the rights and best interests of the child are paramount; children are successful, competent and capable learners; equity, inclusion and diversity underpin the framework; Australian
Aboriginal and Torres Strait Islander cultures are valued and the role of parents and families is supported and respected. (ACECQA, 2013, p. 8)

Further expanding on this child-centred definition of quality ECEC, the OECD (2012) identified key aspects of quality for ECEC educators. These were:

- educational content and practice including the curriculum framework;
- underpinning knowledge of child development and application of pedagogical practices of staff;
- process quality including the day to day experiences of children;
- operational quality including the management and leadership (policy and process) guiding centre operations; and
- child-outcome quality standards, including the physical environment and social interactions that improve the present and future well-being of children.

A definition of quality ECEC for this study therefore includes elements of both structural and process quality (the reader is reminded of these terms below) and the different perspectives of participants. High quality centres have highly trained ECEC educators who have excellent reciprocal relationships with children, their families and community allowing for co-construction of learning (Sylva et al., 2012). These high quality relationships enable all children to develop optimally in all developmental domains such as physically, cognitively (including creativity and language), socially, emotionally and spiritually. These features occur within relevant and supportive frameworks and processes which take into account the diverse perspectives of all participants in ECEC programs.

All of these points are in evidence in interview data collected at Green Leaf ELC in relation to ECEfS illustrated in the first area of this study taken from the research questions about what is quality ECEfS. Data presented in this section illustrate how leaders and educators represented quality ECEfS.

Quality ECEfS means that ECEfS should be in evidence in all aspects of Green Leaf ELCs pedagogical practices. Maddison (Educational Leader) stated that ECEfS is

Part of everyday practice. Not tokenistic. Not doing it because you have to. Staff believe in it so children believe in it. It could be any time: rest time, meal times, doing day to day activities, throughout if it’s done properly. (Transcript, 3/12/15)
Jodie (Director) made a similar statement that quality ECEfS is

Doing it every day, every couple of days, every week. You’re talking about it every day, every week. You’re talking about scraps, where the scraps go, watering the gardens. It’s not something you’ve got posters up about. It’s not just the building. It’s superficial. (Transcript, 3/12/15).

These statements suggest that there is depth of practice at the centre beyond superficial and tokenistic actions in implementing quality ECEfS. Jodie and Maddison’s explanations of quality ECEfS show how it pervades all areas of the centre’s pedagogical practices and explicitly includes the children and families. As explained in Chapter Two, ECEfS includes engagement with sustainability issues, topics and experiences and is about enriching such experiences and building on young children’s knowledge, dispositions and skills to ‘make a difference’ now and for the future (adapted from Davis, 2010).

Quality consists of both structural (Taguma et. al., 2012; OECD Starting Strong II, 2006) and process (Cassidy et al., 2005a; Hamre & Pianta, 2007; Vandell & Wolfe, 2000) quality. Structural quality is the ‘quantitative’ aspect of the ECEC setting such as facilities, processes and staff levels; and process quality is the ‘qualitative’ aspects of what actually happens in the setting especially the relationships such as child–adult and child–child interactions and children’s engagement in the curriculum. In the following sections these two aspects of quality in relation to ECEfS are discussed.

4.3.2 Types of quality

Structural quality

The structural quality of an ECEC setting supports educators to provide a quality ECEfS program. At Green Leaf ELC, structural quality was demonstrated through five elements: change process engagement; curriculum framework and guidelines; stimulating learning environment; educator’s supportive environment; and professional learning toward quality ECEC. Each of these elements is now addressed, with examples drawn from the research data.

- Change Process Engagement

Engagement in the change process is a critical element of structural quality. Green Leaf ELC participates in a cycle of continuous improvement to reach the National Quality Standard. This continuous improvement is demonstrated in the Quality Improvement Plans for Quality Area 3 for 2013 – 2015 (Appendix E) and the Assessment and Rating report (Appendix D)
showing exceeding results in the NQS Quality Areas 3 and 7. These documents show how the centre identified areas of strength and issues needing change which is an ongoing process. For example, the centre’s Quality Improvement Plan 2013 Version 1, stated that the centre would incorporate more edible plants into the environment. This was achieved later that year when the centre purchased a vegetable garden bed for the 3 – 5 year olds playground. ARIES (n.d.) stated that participating in EfS builds competence and provides a change strategy to assist people and organisations to take action regarding sustainability.

- **Curriculum frameworks and guidelines**

Another example of structural quality in ECEfS is the implementation of state and nationally approved curricula. At Green Leaf ELC the Early Years Learning Framework (DET, 2009) and the Queensland Kindergarten Learning Guideline (QKLG) (Queensland Studies Authority, QSA, 2010) both embrace quality ECEfS. The EYLF includes one learning outcome describing children being connected and contributing to their world. Photographs taken at the centre show that children ‘adopted’ animals following an excursion to the local zoo (Figure 8, Photograph 1) demonstrating not only a connection to their local community but also their empowerment to take personal action to make a difference in the lives of endangered animals. This was later followed up with an incursion by an animal farm to further extend the children’s hands-on learning (Figure 8, Photograph 2).

![Figure 8: Children connected and contributing to their world](image)

In the QKLG, the learning and development area entitled “Wellbeing” includes “Exploring ways to show care and concern and interact positively with others, and interest in and desire to interact with others as well as considering and empathising with others” (p. 32) as an example of social sustainability. An example of this is when Maddison (Educational Leader) explained, in response to a question about the broader dimensions of ECEfS, about the social curriculum offered at Green Leaf ELC.
They [the children] tend to gravitate toward each other. You saw just then [the whole centre birthday celebration], siblings went and sat together. We have a lot of cousins here. They don’t have to stay in their groups. They go and spend time with each other. Even as a centre if the toddlers are out here playing and we have a sibling in our room they go and join them. They will ask if they can go and see if someone is okay. We take them over and they have a play for a bit then they come back. (Transcript, 3/12/15)

This is an example of how the centre has followed the requirements of the national curriculum framework which addresses social sustainability. Children are actively involved and making decisions about their interactions; a vital component of ECEfS (Davis, 2012).

- **Stimulating learning environment**

  An expanded view of structural quality is detailed in the OECD Starting Strong II (2006) document. One component of this document relevant to the findings in this study is that a stimulating learning environment be present for quality to occur. In support of this notion, the key principles of EFS in the Australian Government's National Action Plan for Education for Sustainability (2009, p. 9) stated that participation means that personal engagement in EFS is necessary. This was suggested when Jodie (Centre Director) explained that at Green Leaf ELC

  We go outside the fence line and explore a lot down to the gully. We have composting and a worm farm. The worm farm’s more about how we use our scraps and where to put them. We have native bees. We have 3000 of them. They are our pets. We have guinea pigs which we feed scraps to. We have a bird and carrot scraps go to the bird. (Transcript, 3/12/15)

  This shows evidence of a stimulating learning environment with extensive variety and care for animals in the natural environment which will enhance ECEfS at the centre.

  Samuelsson and Kaga (2008) stated that “central to the provision of such quality care and education in the early years is the recognition that early experiences be stimulating and involve positive interactions with adults in appropriate learning environments” (p. 19). Similarly, the OECD (2006) report, Starting Strong II, draws on the work of Malaguzzi and identifies outdoor, experiential play and learning in nature as significant contributors to children’s learning and development.

  Maddison (Educational Leader) talked about challenging play as part of the stimulating learning environment and the support she receives from leadership.
Jodie always says I’m the one that pushes for all the risk stuff. She doesn’t stop me so long as all the proper procedures are done. Like at the moment we have a slack line where the children walk along which is like a tight rope. Nothing is really off limits and we advocate for that at our information sessions with our kindy parents. They need to be prepared. We go down the gully and we go box sliding down the hill down the back of the paddock. There’s no way of saying that something is not achievable. I’ll always find a way to make it safe. (Transcript, 3/12/15)

This example shows that the leadership team is actively supporting staff to overcome challenges and implement a stimulating learning environment.

Selection and analysis of the following set of photographs (Figure 9) depicts the stimulating learning environment found at Green Leaf ELC encompassing the four dimensions of sustainability as well as evidence of ECEfS pedagogical practice.

Figure 9: Photographs of centre practices that support the notion of structural quality

Structural quality in ECEfS can be observed in the provision of infrastructure and materials encompassing the four dimensions of sustainability in a stimulating learning environment. Photographs 1, 5 and 7 show upcycled equipment created by educators and the centre’s maintenance person used for dramatic play as well as science and mathematics learning (economic dimension). Photographs 2 and 6 show the purposeful use of native plants and other natural materials to make a low maintenance garden to attract local wildlife (environmental dimension). Photograph 4 shows children raising money by making sweets to sell to families to buy the new centre animal (social and economic dimension). Photograph 8
shows the guinea pig hutch which is in the children’s playground. Children care for the guinea pigs during their play sessions (environmental dimension). All of these practices are within the governance of the National Quality Standard (political dimension).

Another aspect of a stimulating and sustainable learning environment and, therefore, of quality ECEfS being implemented, is the sustainable building design and surrounds at the centre. Photograph 3 shows the waved timber atrium ceiling which captures hot air then releases it through vents keeping the building temperature at a reasonable level year round. The atrium is a large shared space in the centre of the building where groups or the whole centre meet for social events and learning, thus serving a dual environmental and social purpose. Jodie (Director) outlined features such as sensor lights and sensor taps that automatically turn off and water tanks that are underground for gardens as part of the sustainable physical environment at the centre. The building colours were chosen to merge with the environment with even the internal colours reflecting the outside. The building orientation and aspect including the car park was located so it did not take space that was better used for breeze and shade for the children. There is a mini orchard, a community garden and native plants contributing to the stimulating sustainable learning environment. Jodie referred to the curved timber wall in the babies’ room as the baby cocoon. She said it was chosen because of “aesthetics and the timber took away from the white clinical look that child care centres can look like to soften that environment as they are the youngest members of our community” (Transcript, 3/12/15). Children feel a sense of belonging to the centre if their environment is reflected in the setting (BISS, n.d., p. 2). Further elaborating on the physical environment of the centre, Jodie stated “we have deeper verandas than other centres we visited which were just a standard shallow, ours are very deep so sun doesn’t get on to the verandas” (Transcript, 3/12/15).

A key aspect of a stimulating learning environment for ECEfS is the classroom materials offered. Jodie (Centre Director) said that “we’re fortunate to have a generous enough budget to get them what they need. Recently I was asked for garden gloves for all the children and I went out and bought them” (Transcript, 3/12/15) showing support for the learning process. As equipment needs are identified, the centre leadership team responds and thus quality ECEfS is embedded.

A stimulating learning environment can contribute to a good quality educational program by seeing the environment as an educator, the third teacher, “as the Reggio Emilia
approach does, we can begin to notice how our surroundings can take on a life of their own that contributes to children's learning” (Strong-Wildon & Ellis, 2007, p. 40).

As shown in this section the provision of a stimulating learning environment sets the stage for quality ECEfS to occur.

- **Educators’ supportive environment**

  As well as the children’s stimulating learning environment, as an indicator of structural quality, Jodie (Director) referred to the educators’ environment when discussing the design of staff spaces at the centre. She noted, that it

  > Was very deliberate to have a staff wing where staff had the opportunity to get right away. So they don’t step out into a hallway bang into a parent or someone. It gives them time to wander through, collect their thoughts, get back into it. (Transcript, 3/12/15)

  This is an example of social sustainability as an aspect of quality ECEfS and links to the work of Friendly, Doherty and Beach (2006) who state that staff physical environments contribute to quality ECEC.

  Whether there are physical amenities that support staff – a staff room and adequate program resources – and whether the nature of the facility conveys that early childhood education is a respected, valued career have an impact on the morale of the people working in the program and, thus, on the quality of the program. (p. 26)

  Jodie (Director) and the other educators alluded to strong support within the team as a major factor in success of their programs, staff employment longevity and satisfaction. Maddison (Educational Leader) explained that “as a centre we are sustainable as a staff. They invest a lot of time into us. In the long run it pays off, like PD, above award wages” and that “we have a very low turnover of staff” (Transcript, 3/12/15). This contradicts the common practice in ECEC of “poorly compensated leaders” (Hard & O’Gorman, 2007). Huntsman (2008) found that low wages affect the ways in which staff interact with children and are related to high turnover rates.

- **Professional learning toward quality ECEC**

  The professional learning process is another indicator of structural quality. All interviewees at Green Leaf ELC had experienced professional learning in the area of sustainability and in Maddison’s case this lead to her leading professional learning sessions outside the centre. Maddison (Educational Leader) indicated that
Most staff have the opportunity of going to some sort of sustainability PD but Jodie usually sends a select few. I do more PDs than anybody so I go to quite a lot of them. We did have a sustainability person appointed so that’s Deb at the moment so she goes to a lot of the PDs but that’s not actually in her role, or even if we read an article or on Facebook, there’s heaps on Facebook! It’s just sharing it with your staff. Conversations at lunch time are usually about work not about anything else. Jodie passes research articles on to us; she has a bit more time to do that. (Transcript, 3/12/15)

Jodie (Director) offered that she has “professional conversations at staff meetings. I will email interesting things to them they can read at their own leisure” (Transcript, 3/12/15).

Inquiry and dialogue as part of professional learning indicates structural quality. This occurs between the Educational Leader and educators at Green Leaf ELC. Maddison (Educational Leader) stated

I see myself as not having all the answers, I see myself as a learner as well, and I willingly accept others’ ideas. I’m not going to give them all the answers. As Educational Leader I’m there to get them thinking about their practices, what they should be doing and how they can do things better. I’m not going to tell them how to do it. It’s all in the approach. The types of questions I ask aren’t confronting - it’s just for them to think about and how they could improve. (Transcript, 3/12/15)

Included in definitions of structural quality in ECEC is that a critical reflection process within professional learning be present. According to Elliott and McCrea (2016) “informed by critical theory, reflection invites us to question and challenge the norm; in this context and most significantly here, this means interrogating our unsustainable ways of being. This can occur at the centre daily or more formally through professional learning” (p. 32). Radich (2012) stated that “professional learning opportunities are being rolled out by the professional support communities (PSC), training institutions and other providers to support educators to upgrade their qualifications, and/or provoke reflective thinking about their current skills, practices and knowledge” (p. 4). Ongoing reflection was mentioned by the educators as key to supporting their pedagogical practice. Maddison stated that “Jodie does a lot of reflective questions in the staff room where we comment on things and it’s just to keep us thinking and reflecting on what we are doing” (Transcript, 3/12/15). Jodie (Director) stated that one professional learning strategy was to keep a reflective journal in the staff room where questions of relevance are posed and educators have input. Maddison (Educational Leader) poses curriculum based questions in the reflective journal. Two pages were titled “What
SUSTAINABLE PEDAGOGICAL LEADERSHIP IN EARLY CHILDHOOD EDUCATION AND CARE: IMPLEMENTING THE 2012 AUSTRALIAN NATIONAL QUALITY STANDARD

sustainability means to us?” (Appendix B) and “Our commitment to sustainability” (Appendix F). She stated

So that just sits on the staff table and people add their bits. Yes it’s critical reflection as a team. Sometimes the question’s too much so you only get a couple of responses, sometimes a lot, I don’t force anyone. (Transcript, 3/12/15)

The above example shows that the leadership team “has an influential role in inspiring, motivating, affirming and also challenging or extending the practice and pedagogy of educators” (ACECQA, 2013, p.1). The Green Leaf ELC educators’ involvement in critical reflection “builds a learning community and team culture with an explicit pedagogy, common purpose and shared goals. They can create an emotional climate which enables people to participate and ‘buy into’ continuing improvement” (McDowell Clark, 2012, p. 397).

This supportive in-house professional learning includes pedagogical leadership guiding staff in a “journey of joint inquiry, exploration and reflection” (Waniganayake & Semann, 2011, p. 24).

The importance of professional learning, including inquiry and dialogue as well as critical reflection, toward quality ECEIS is emphasised by Huntsman (2008) who stated that “the most significant factor affecting quality appears to be caregiver education, qualifications, and training — which are aspects of structural quality” (p. 7). The importance of professional learning is also supported by the Starting Strong II (2006) document which stated that “professional education and work conditions is key to quality centres” (p. 7). Rodd (2006) also mentioned ECEC leaders specifically undertaking professional learning to “embrace a life-long learning perspective towards their own development and regard leadership as a key aspect of this development” (p. 250).

Finally, structural quality promotes expansion of the dimensions of quality “rather than viewing the discourse of quality as taken-for-granted, appropriate and standardized across cultures, communities and/or early childhood programs” (Dahlberg, Moss & Pence, 1999). Jodie (Director) talked about advocating for a bush kindergarten at the centre which goes beyond expectations of standards. She stated

We want to build a bush kindy area but it needs a fence which will be $30000 so I am applying for grants which have been unsuccessful so far. I have tried to show it is in the
While the NQS suggests children experience natural environments and that they take an active role in caring for the environment and contributing to a sustainable future, the inclusion of an outdoor kindergarten program transcends expectations for quality ECEfS in the NQS.

Structural quality therefore consists of the structures and platforms that are in place that allow ECEfS to flourish as evidenced by the ‘exceeding’ rating received at Green Leaf ELC against requirements of the NQS. Specifically, at Green Leaf ELC, these elements were a commitment to the change process through the NQS, the approved learning curricula used at the centre, the stimulating learning environment for the children and a supportive environment for the staff. Professional learning which includes inquiry, dialogue and critical reflection contributes to the high quality at Green Leaf ELC. The structural quality allows this centre to exceed and in some cases go beyond accepted national quality standards.

**Process quality**

As outlined in Chapter Two, a second aspect of quality, process quality, is what children actually experience in an ECEC program (OECD, 2006). Process quality indicators have an influence on children’s well-being and development and include relationships such as teacher-child and peer-peer interactions (Cassidy et al., 2005a; Hamre & Pianta, 2007; Vandell & Wolfe, 2000). In this section, this researcher provides examples of process quality with relevance to ECEfS, derived from analysis of the research data, in evidence at Green Leaf ELC. These are: educator-child relationships; hearing children’s voices for sustainability; inclusive social justice practices; sustainability-related curriculum content; and specific quality improvement processes related to ECEfS.

- *Educator-child relationships as an indicator of process quality*

  Educator – child relationships are a key process quality indicator (OECD, 2006). An example of educator-child interactions are the respectful, collaborative and reciprocal relationships between children, their families and educators. The Green Leaf ELC included families and the community in this collaborative learning relationship. Jodie (Centre Director) stated that

  We signed up with Nature Qld. They give us passports to give out to families. We’ve done it three times this year and hopefully increase this next year. We’ve changed the name to ‘Outdoors with Families’. We’ve done mountain climbs to Mt Ngungun and
we’ve been to Bribie beach twice on the weekend. Staff come, parents come, just to try to get families back to the environment. (Transcript, 3/12/15)

This interview response shows that children, families and educators were engaged in social and environmental experiences. An analysis of several key ECEC documents in Table 2, suggests that respectful, collaborative, reciprocal relationships were fundamental for children’s learning. For example the EYLF Outcome 2 Children Are Connected with and Contribute to Their World includes elements such as “participate in reciprocal relationships” (DET, 2009, p. 26) and “demonstrate an increasing knowledge of and respect for natural and constructed environments” (DET, 2009, p. 29).

Regarding social sustainability, Maddison stated that in relation to family – educator relationships

As a whole centre we make relationships with families in other rooms before they come to us. I know families in the babies’ room and I won’t have them for four years. Just saying hello to them, stopping and having a chat, being interested in their life I suppose. (Transcript, 3/12/15)

Good relationships support social sustainability. Getting to know families, their values and beliefs early on creates more substantial relationships in the long term. Embracing ECEfS through the social sustainability dimension includes establishing substantial relationships, where the culture of individual families is known, supporting the notion that “there is a need for the incorporation of positive and relevant cultural aspects in education from early childhood, in embedding principles of sustainable development in lifestyles for optimal synergy with nature and human well-being” (Otieno, 2008, p. 93).

Peer to peer interactions are also an aspect of process quality (Cassidy et al., 2005; Hamre & Pianta, 2007; Vandell & Wolfe, 2000). Jodie (Director) stated that

We have a lot of siblings and friendships so we encourage the children to go and see their siblings and friends. We have an open door day where children mingle and that is when you see them come together and it’s a really nice time. Little ones go to the big side and big ones go to the little side. We celebrate educators’ birthdays with all of the children. Every child comes to the atrium to celebrate. It makes the educators feel important and it’s important for the children to be part of it. We encourage families to bring cakes. (Transcript, 3/12/15)
Maddison (Educational Leader) talked about process quality and social sustainability when she said that

The main rule in my room is to be kind and friendly. Not everyone has to be friends but to be kind and friendly: getting involved in their conversations and modelling and supporting when needed to develop their relationships. (Transcript, 3/12/15)

Maintenance of high functioning, healthy social relationships sustains groups of children and allows ECEfS learning to take place. “Early childhood is a period when the foundations of thinking, being, knowing and acting are becoming ‘hard wired’, and relationships – with others and with the environment – are becoming established” (Davis, 2008, p. 20). Social relationships help sustain a positive learning culture at the centre. Western Australia Council of Social Centres (WACOSS) (2013) state that

Social sustainability occurs when the formal and informal processes; systems; structures; and relationships actively support the capacity of current and future generations to create healthy and liveable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life (n.d.)

At the case study site the processes enacted by the leadership team such as the NQS quality improvement process, staff support mentioned earlier and encouragement of social relationships between children support all children in their learning journey.

- **Hearing children’s voices for sustainability**

Children’s voice as a central feature of ECEfS is another indicator of process quality ECEfS (Davis, 2012). Jodie (Centre Director) stated that “the important thing is to educate the children. They’re the ones coming through. If you don’t tell them the full story they will see that as meaningless and ask ‘why do we have to do that?’” (Transcript 3/12/15) indicating that children are involved in deeper knowing about ECEfS principles. Grace (Lead Educator) stated that

When we do our group time or if I’ve got an activity planned we have a discussion prior so the children have some idea as well as taking on if they’re talking about something they are learning at home then I try to extend that (Transcript, 3/12/15).

This shows how the children’s voice is incorporated into ECEfS pedagogical practices. These comments suggest that at Green Leaf ELC, children are seen as empowered, competent and capable agents of change (Davis, 2008). Children are not passive in this learning process and participation is a major component of ECEfS (DET, 2009). In turn, educators are confident
in children’s capabilities to engage in co-construction of learning in ECEfS as well as at times leading this learning (DET, 2010, p. 11) as illustrated previously in the ‘Concretors’ learning story and below in the ‘Gubbi Gubbi Dancers’ learning story.

- **Inclusive social justice practices for process quality**

  As part of process quality, social justice stands as a strong theme in quality ECEfS (Elliott, 2010) and includes the concepts of human rights and equality. Photographic data collected for this study shows collection baskets for families in need at Christmas time and a shared food station (see Figure 10). A local charity group was sourced and families donated toys over a period of a month. Baskets were then delivered by staff and families to the charity for distribution. There is a shared food station where Green Leaf ELC families and staff can share surplus food items with each other throughout the year.

  ![Figure 10: Social justice sustainability action](image)

  The Brundtland Report (WCED, 1987) supports the idea of sustainable social justice stating there would be a shift from development that would respect and nurture the natural environment to encompassing social justice and the poverty eradication as key principles of development that is sustainable. Children’s involvement in contributing to these activities allows them to take action and make a difference to the lives of other families.

- **Sustainability-related curriculum content**

  Curriculum occurs in both the structural and process aspects of quality. In the previous structural quality section it was shown that the children’s learning was organised in an approved learning framework or guideline. This discussion of process quality refers to curriculum as what children actually experience at Green Leaf ELC. It is not bound to one ‘subject area’ but all four sustainability dimensions are evident across principles, practices and outcomes for children. The notion of no beginning or end to learning is seen in the ethos of lifelong learning for now and the future. Learning, and therefore curriculum, is holistic in that it touches all areas of a child’s
development (DET, 2009). To illustrate these notions, the Green Leaf ELC’s social media page highlights the story of the Gubbi Gubbi dancers.

“As you can see from my previous post we had the Gubbi Gubbi dancers here last week performing at our end of year celebrations. This morning the children made their own body paint with the clay, rocks and water. I told them that I had some Ochre that they could use but we needed something to transport it in. A child said 'you need a Coolamon'. So out we went looking for a Coolamon (a traditional carrying vessel) we found a palm frond. The investigation continued with the children adding Didgeridoo’s (sic) and some art work! What a busy and fun morning exploring our land and using the knowledge of the aboriginal people to broaden and strengthen our knowledge of Indigenous Australians”

Figure 11: Social media entry “Gubbi Gubbi Dancers”

The photograph shows the educator and children mixing ochre to make paint on the ‘coolamon’. This is an example of inclusive learning which “emphasizes interdisciplinary and holistic principles. Learning for sustainable development in the whole curriculum, not as a separate subject” (Liu & Liu, 2008, p. 46) as there can be seen elements of art in the form or painting and music and science investigation as they searched the natural environment for a suitable vessel. Children are seen working closely together and with educators, showing co-construction of learning as well as genuine social relationships. It also encompasses broader sustainability themes that introduce children to “concepts of culture, diversity and equity between groups of people in the places in which they live” (Miller, 2014, p. 64) so that “Australian Aboriginal and Torres Strait Islander cultures are valued” (ACECQA, 2013, p. 8).

- **Specific quality improvement processes for ECEfS**

This research shows that quality ECEfS is in evidence in everyday pedagogical practices at Green Leaf ELC and is part of their cycle of continuous improvement. In fact, it is
when the educators paused to think, as they were asked to do during their interviews, that they then identified a long list of the sustainable practices they were implementing.

Maddison (Educational Leader), for example, stated

We always evolve and never stand still. So it’s good to be able to do that, not set in our ways then. We still feel that we don’t do enough because we don’t think about it, because we just do it. When you do think about it we are actually doing all of that. (Transcript, 3/12/15)

Much like Green Leaf ELC, Davis et al. (2005) found that, over time, ECEfS can become entrenched, or enculturated, in the centre practices so that “in effect, the centre operates with an ‘environmental ethic’ that has become part of its culture” (p. 6).

Both structural and process quality is present in high quality centres. This includes the educational content and practice, knowledge of child development, pedagogical practices, management and quality standards (OECD, 2006). This has led to Green Leaf ELC engaging in high levels of expertise. Maddison (Educational Leader) indicated this when she said

When I first started it was about setting everything up, now it’s more about providing support that they need. I was putting things in practice in the first year or two. Now it’s supporting staff and improving but there’s not as much change as there was in the beginning. (Transcript, 3/12/16)

This statement suggests that ECEfS has become embedded or enculturated in the centre. The centre received an exceeding rating in the NQS Assessment and Rating process which further supports this evidence. Interestingly however, the Director of Green Leaf ELC did not elect to apply for the ‘Excellent’ rating in the NQS Assessment and Rating acknowledging that there are still improvements and refining to be actioned at the centre. The Excellent rating is the highest rating an ECEC centre can achieve in the NQS. It involves a separate application to ACECQA outlining a quality standard above exceeding and sets a centre apart from peers in the sector as exemplary and as a leader.

This section has provided examples of how quality ECEfS, both structural and process, was demonstrated at Green Leaf EC. Interview data, documentation, social media page entries and photographs illustrate that quality ECEfS has now become embedded or enculturated in Green Leaf ELC’s pedagogical practices such that the leadership team identified that educators
were now evolving and improving ECEfS rather than having to set up and concentrate on the basics.

4.4 SUMMARY OF CHAPTER FOUR

This study set out to explore ideas about quality ECEfS and how effective pedagogical leadership can inform and support educators, using ECEfS as the motif. This chapter analysed the data in relation to ECEfS, pedagogical leadership and quality ECEC at the Green Leaf ELC and how the leadership team informed and supported educators in ECEfS resulting in the presentation of a new term to describe pedagogical leadership that focuses on a broad view of sustainability: SPLE. The main data source was interview responses from the two members of the leadership team and with three educators within the centre. Supporting data sources included documents such as philosophy statements, reports and policy, social media pages and photographs showing ECEfS pedagogical practices in action.

Data analysis occurred through a two-phase process guided first by analysis according to the two research questions, followed by thematic analysis that derived three themes. This allowed data to demonstrate the staff understandings and enactment of quality ECEfS and how SPLE informed and supported staff to implement quality ECEfS.

The final chapter of this thesis, Chapter Five, discusses the study findings. The thesis is concluded by exploring theoretical and policy implications of the research findings and then suggests future research possibilities.
Chapter Five: Conclusion

This study explored educators’ understanding of quality ECEfS when implementing the NQS in an early learning centre. It examined how the pedagogical leadership team of the case study site informed and supported educators in implementing quality ECEC. The key outcome of this examination was the researcher’s development of the newly coined term, SPLE.

Chapter One introduced this study and Chapter Two provided a review of literature relevant to the focus of this study: specifically pedagogical leadership in ECEC; ECEfS; and quality ECEC. Chapter Three detailed the methodology chosen for this research – a qualitative, historical case study. This was followed by Chapter Four which presented the data findings and a discussion of data results. This chapter, Chapter Five, restates the research questions and study findings then concludes this thesis by exploring theoretical and policy implications of the research findings and then suggests future research possibilities.

For the purposes of this study, the research questions were as follows:

Research Question 1:

How is quality ECEfS understood and enacted at the Green Leaf Early Learning Centre?

Research Question 2:

How did pedagogical leadership inform and support quality ECEfS at the Green Leaf Early Learning Centre?

The study was initiated as a response to the introduction of the 2012 NQS in Australia and when early childhood educators were coming to terms with and in many cases struggling to implement new requirements relating to pedagogical practices relating to sustainability. This study set out to identify through educator interviews, document analysis, social media entries and photographic evidence how one ECEC centre implemented the National Quality Standard 3.3 and 7.1. To do this, the study focussed on pedagogical leadership and ECEfS and examined how it was understood and enacted in the research site with the aim of providing quality learning for children. ECEfS was chosen as it was a new area in the 2012 NQS when this study began. It was envisioned that this research may help fill the gap in understanding about ECEfS and its pedagogical practice that many educators were experiencing at that time.
The influence of SPLE, a new term coined by the researcher, to inform and support implementation of ECEfS was considered in this thesis. It is evident that the actions and outcomes of pedagogical leadership in embedding ECEfS at Green Leaf ELC have contributed to the overall exceeding quality Assessment and Rating in the NQS at the centre, although a clear determination of this link is not within the scope of this study.

This chapter summarises the findings of the research. Following this summary, the link between the research findings and theoretical implications is shown. Policy recommendations and directions for future research are discussed, after which a final statement about the study’s conclusions is presented.

5.1 THE FINDINGS OF THE STUDY

Through thematic analysis and using the research questions, three themes were identified and have been detailed in the previous chapter. These are summarised below.

- Theme 1: Sustainable pedagogical leadership informing and supporting Early Childhood Education for Sustainability

- Theme 2: Educator understandings of Early Childhood Education For Sustainability

- Theme 3: Quality Early Childhood Education for Sustainability

5.1.1 Sustainable pedagogical leadership informing and supporting Early Childhood Education for Sustainability

The leadership team from Green Leaf ELC informed staff about ECEfS through their vision for the centre, distributed leadership approaches including positional and non-positional leadership and by participating in and providing professional learning opportunities.

Leadership strategies informing educators to embed ECEfS included the leadership team guiding the educators toward a clearly stated vision for the centre. A vision for the future was included in centre documentation such as the Centre’s philosophy as well as the Educational Leader’s vision statement. The Educational Leader’s vision, implemented throughout the study period and articulated in 2015 (Appendix I), included a schedule of how educators would be specifically informed in pedagogical practices.

High quality professional learning specifically in relation to ECEfS undertaken within and outside the centre was another way that the leadership team informed staff about ECEfS at Green
Leaf. In-house professional learning was presented both from the leadership team and within the educator team and this encompassed all staff members. This showed how the leadership at the centre adopted a distributed approach as educators in non-leadership positions mentored other staff with respect to implementing ECEfS. All staff members including the leadership team benefitted from extensive and varied professional learning such as action research projects, travelling interstate to walking tours of other centres, hosting events at the centre, staff mentoring other staff to address gaps in knowledge and attending local council workshops.

Strong leadership support for ECEfS pedagogical practices at Green Leaf ELC was shown through the centre’s organisation and governance. This was particularly illustrated by the centre’s participation in the NQS Assessment and Rating process. Leadership support was seen in the demonstration of ethical leadership, mentoring and encouraging educators to have a voice as well as leaders inspiring themselves and others around them. Providing an inclusive team environment and offering fair remuneration and time for programming and reflection provided further methods for strong leadership support.

The leadership team at Green Leaf provided a positive organisational climate in which ECEfS was allowed to flourish. This occurred within the structure of the National Quality Standard as an example of governance outlined in Quality Area seven. Participation in the continuous improvement process of the NQS led to an overall exceeding rating for the centre in 2013 which was an exceptional result for a new centre.

Leaders supporting educators in ECEfS at Green Leaf occurred through ethical leadership with examples of respectful, democratic and courageous action and advocacy shown by the leadership team. This approach by the leaders may have contributed to the centre’s ECEfS pedagogical practices going beyond ‘meeting’ to ‘exceeding’ and in some cases beyond the scope of the NQS. Leaders supporting educators to embed ECEfS at the research site also involved a holistic approach to staff support: intellectual, emotional and social. The leadership team achieved this by providing critical reflection opportunities and support in the form of time and remuneration, social events, team building exercises, encouraging positive staff relationships and a sense of belonging to the centre.
5.1.2 Educator understandings of Early Childhood Education for Sustainability

Educators at the research site described different levels of understanding about sustainability. It was initially surmised by this researcher that these different understandings may affect how ECEfS pedagogical practices were enacted.

Generally, the leadership team, which consisted of the Centre Director and the Educational Leader, articulated a broad understanding of the four dimensions of sustainability: environmental, social, political and economic. This showed a deeper knowledge of what sustainability includes. By contrast, the Lead Educators and Assistant Educators, those educators most responsible for implementing ECEfS in the centre, articulated in their verbal and written statements a more limited view that mainly emphasised the environmental dimension of sustainability. Interestingly, however, the actual pedagogical practices of these educators suggest a deeper and broader understanding of ECEfS. Thus, there was a mismatch identified between what these educators stated verbally, in written form on the social media page and in centre documentation regarding their understanding of ECEfS and the practices that were evident in their programmes or observed occurring at the centre. For example, the educators’ pedagogical practices suggest a strong sense of social justice but they did not make the link between social justice and sustainability in the interviews or documents. It is proposed by the researcher that the leadership team may be more aware of the broad scope of the term sustainability than the educator team i.e. that sustainability is fundamentally a social justice issue. Social sustainability was a strong dimension of sustainability in evidence in inclusive pedagogical practices at the centre. This was evidenced by peers and siblings being encouraged to mix, the strong social support offered to the staff at the centre, fundraising for less fortunate families and sponsoring animals at the local zoo.

The broad definition of sustainability that embraces the four dimensions is not strongly emphasised in the NQS, and yet the application of this broader understanding was in evidence at the research site. Mention of sustainability in the 2012 NQS occurs in one of the seven Quality Areas and relates to the physical environment – only one of the four dimensions of sustainability. This may have contributed to the limited articulation of the scope of sustainability by some of the research participants in this study.

5.1.3 Quality Early Childhood Education for Sustainability

The study findings suggested that there is a depth of pedagogical practice at the centre beyond superficial and tokenistic actions in implementing quality ECEfS. The data suggest that
pedagogical practices have evolved over the three year study period to the present enculturation of ECEfS in Green Leaf ELC “where the centre operates with an ‘environmental ethic’ that has become part of its culture” (Davis et al., 2005, p. 6) although it was acknowledged by the Director that educators embraced sustainable practices at different places in this time period. It was evident that ECEfS pervaded all areas of the centre’s programs and practices and explicitly included the children and families as key stakeholders with regard to sustainability. The ECEfS program included engagement with sustainability issues, topics and experiences and was about enriching such experiences and building on young children’s knowledge, dispositions and skills to ‘make a difference’ now and for the future (adapted from Davis, 2010a). Opportunities for further expansion of children’s voice in the program could be found.

ECEfS at the site was examined through the interviews in which the participants described high quality pedagogical practices. Two aspects of quality were identified i.e. structural (Green, 2007, p. 98) and process quality (Cassidy et al., 2005; Hamre & Pianta, 2007; Vandell & Wolfe, 2000). As outlined in the literature review, structural quality is the ‘quantitative’ aspect of the ECEC setting such as processes, facilities and staff levels. Structural quality was demonstrated by Green Leaf ELC in their participation in the NQS as an example of change process engagement. Use of approved curriculum frameworks and guidelines, provision of a stimulating learning environment and a structured program of professional learning were further examined as examples of structural quality. Professional learning undertaken at Green Leaf ELC, which included inquiry, dialogue and critical reflection (Rodd, 2013), may have contributed to the high quality pedagogical practices in embedding ECEfS at Green Leaf ELC.

Process quality is the qualitative aspects of pedagogical practice especially the relationships such as child–adult and child–child interactions and children’s engagement in the curriculum. Evidence such as the ‘Concreters’ Story’ on the centre’s social media page showed the inclusion of children’s voice in programs, social justice actions, and engagement with the approved learning framework (EYLF and the QKLG), and the quality improvement system (NQS).

At Green Leaf ELC, quality ECEfS included all four dimensions of sustainability and was driven by the context of the centre as well as the expertise of the leadership team. Elliott and McCrea (2016) agree that “leadership is a key driver for implementing change for sustainability” (p. 44). Advocacy by the centre’s leadership team ensured sustainable practices could occur.
While the centre received an overall ‘exceeding’ rating in their NQS Assessment and Rating report, some of the practices in the centre went well beyond the scope of the NQS. These included the strong social sustainability practices of staff support and encouraging strong relationships between children within the centre. In the area of environmental sustainability ECEfS pedagogical practices went beyond the NQS with the employment of a full time Outdoor Educator whose role it was to work on long term environmental projects with children and future plans for a bush kindergarten where some of the children’s learning would be conducted exclusively in the outdoors.

At Green Leaf ELC, pedagogical practice in ECEfS in evidence at the case study site included more than those mentioned in the NQS and indicated a broader understanding and application of possibilities for ECEfS. This means that the notion of what constitutes quality pedagogical practice may need a broader definition than what the current and revised NQS offers, as the data collected at Green Leaf suggest that, with high quality leadership, those broader notions of sustainability can be implemented. As La Paro et al. (2012) stated “there may not be a one-size-fits-all assessment for quality. Programs operate in different contexts, have different workforce characteristics, and serve a variety of children and families. It stands to reason that “quality” may have different implications for different programs, and assessing quality may have different purposes” (n.p.).

5.2 IMPLICATIONS OF THIS STUDY

In this section the researcher discusses implications of this study. First, implications for theory development around the topics of pedagogical leadership in ECEC, ECEfS and ECEC quality are discussed. Second, the implications of this study for ECEC policy and practice are articulated, and third, the implications of this study for leadership of ECEC centres are presented.

5.2.1 Theoretical Implications

In Chapter Two of this dissertation, it was noted that this study focused on sustainability and ECEfS and examined how these concepts were understood and enacted in an ECEC centre. The influence of sustainable pedagogical leadership on enacting quality ECEfS was considered. The theories relating to ECEfS, pedagogical leadership and quality ECEC were examined in terms of the findings. The study has offered up a new term, Sustainable Pedagogical Leadership in ECEC (SPLE), reflecting the four dimensions of sustainability and is defined as working with other educators ethically and respectfully in a positive and inclusive organisational culture. Pedagogical leaders lead other educators toward a clear vision for sustainability, mentor and
critically reflect and empower educators with rich and varied professional learning pertaining to sustainability. They provide distributed leadership opportunities leading to sustainable transformational change and therefore continuous improvement.

**5.2.2 Pedagogical Leadership theory implications**

Four types of leadership were explored in relation to the leadership practices at Green Leaf ELC: distributed, collaborative, transformational and catalytic.

As mentioned in Chapter Two, distributed leadership is common in ECEC where tasks are delegated and shared among people (Pearce & Sims, 2001) involving a culture of trust and respect where openness is imperative. At Green Leaf ELC the research showed that tasks were allocated or taken on board according to the expertise of educators in particular responsibilities.

According to Ebbeck and Waniganayake (2004), distributed leadership is based on valuing knowledge or expertise in diverse spheres of activity including curriculum, advocacy, personnel and community development. These four elements were actioned by both the Director and Educational Leader of the study site as they implemented and advocated for a stimulating and challenging curriculum, made strong efforts to develop personnel at the centre and were reaching out to and inviting in community organisations and representatives to further enhance quality provision of ECEfS.

Jones and Pound (2008) state that distributed leadership approaches acknowledge that all ECEC educators have a sound knowledge base or expertise in educational pedagogical practices. This was being demonstrated at Green Leaf ELC as educators spent time in practice and professional learning to hone their skills. Distributed leadership resulted in staff motivation and increased inspiration, potentially contributing to continuous improvement of practices within the centre (Rodd, 2013). Distributed leadership was also evidenced as educators took on different leadership roles such as providing professional learning to other staff and becoming an Outdoor Educator at the centre.

Collaborative leadership occurred where leaders shared and gained knowledge about ECEfS with other parts of the ECEC sector. Collaborative leadership involves working together both internally and externally to the centre (Rubin, 2009). External work by the leadership team at the study site included liaising with other ECEC centres in the local area, community agencies and commercial organisations.
As outlined in Chapter Two, transformational leadership includes four components of idealised influence, inspirational motivation, individualised consideration and intellectual stimulation (Bass & Riggio, 2006). Transformational leadership and resulting continuous improvement in practice was in evidence through the leadership team’s vision and inspiration for the educator team. The ability to be role models for the educators and to work and professionally develop alongside them in ECEfS provided further evidence of transformational leadership approaches at Green Leaf. Providing empathetic leadership and encouraging educators to be innovative and creative leading to high level ECEfS pedagogical practices at Green Leaf ELC also demonstrated transformational leadership. The leadership’s charisma may be linked to interpersonal skills of care, empathy, individualised relationships with educators, role modelling enthusiasm and a willingness to advocate for extensive change, particularly with respect to ECEfS.

Catalytic leaders, who are considered ground-breakers with high levels of credibility within and outside the teaching profession (Silcox & MacNeill, 2006) were beginning to emerge at the centre as the leadership team described taking their skills beyond the scope of the centre. The centre had become a hub for professional learning including ECEfS by hosting events attended by other centres and organisations. The leadership team had been invited to address a group of ECEC leaders on a panel of experts from the field and to an ECEC organisation about the NQS Assessment and Rating process. Green Leaf ELC had been used as an example of a centre with exemplary practices on a bus tour hosted by an industry leading organisation as well as tertiary educational institutions. The leadership team had presented information to organisations such as a kindergarten advisory centre.

The leadership team showed traits of all four leadership types shown in the literature review, namely distributed, collaborative, transformational and catalytic. Leadership was shown to be non-hierarchical, empathetic, holistic and dynamic as the centre evolved to ever higher quality levels of pedagogical practices. As a result, the four dimensions of sustainability—environmental, economic, social and political as detailed in section 5.2.7 were evident in leadership applied at the centre.

One implication for general leadership theory as a result of this study is that the early education field offers new thinking and practice. A new ECEC-specific type of leadership, driven by an interest in ECEFS is emerging, and especially once enculturation of transformative pedagogical practices at a centre occurs. Due to the continuous improvement process embedded within ECEfS, more static definitions of the leadership in ECEC may not suffice. Holistic
leadership with a strong social justice bias was evident at the Green Leaf ELC where democratic approaches and distributed leadership were shown. This researcher proposed that the term SPLE better described what is occurring at the centre and this could provide a model for ECEC more broadly.

5.2.3 ECEfS theory implications

EfS is defined as continual transformational change through learning and taking action for sustainability in a holistic way, encompassing environmental, political, economic, and social aspects so that options for future generations are not compromised. Application of this definition was in evidence at Green Leaf ELC.

Data analysed at Green Leaf ELC showed evidence of the key principles of ECEfS (ARIES, n.d.) as follows:

- transformation and change, shown in the evolution of ECEfS pedagogical practices in evidence at the centre;
- education for all and lifelong learning, shown in the professional learning occurring at the study site as well as the children’s learning extending beyond superficial experiences;
- systems thinking, evidenced by the centre’s participation in the NQS process and the integration of the four dimensions of sustainability;
- envisioning a better future, revealed in the social justice actions taking place at the centre;
- critical thinking and reflections, illustrated in professional learning including critical reflection and dialogue undertaken by educators as well as that resulting from children’s learning experiences;
- participation, demonstrated through inclusion and actions of children, families and educators; and
- partnerships for change, shown by the centre’s strong associations within the centre and with outside agencies to expand ECEfS to the wider community.
ECEfS pedagogical practices at Green Leaf ELC were shown to be transformative, empowering and participative including engagement with sustainability issues, topics and experiences, enriching such experiences and building on the children’s knowledge, dispositions and skills to ‘make a difference’ now and for the future (adapted from Davis, 2010a).

The implications of the findings of this study in the area of ECEfS theory is that an emphasis on social critique and social justice, as shown in the above ECEfS principles on display at the research site, can provide a space for inclusive, transformative pedagogical practices. A specific example of this relates to the inclusion of children’s voice. “Children’s ‘voice’ is a concept which is part of a wider approach, including listening and participation” where children are seen as “competent, active agents, rather than as subordinate or secondary” (Coleyshaw, Whitmarsh, Jopling & Hadfield, 2012, p. 9). Children’s voice addresses equity issues when educators create mutual respectful relationships, where parents and children are heard and their ideas are included in the environment (Thomas, n.d.). At Green Leaf ELC, while some practices already reflected ‘children’s voice’ this was an area that could be further explored with the leadership team and educators. This could be seen as both a critique of the centre and offers a contribution to current research and discussions about theoretical implications.

- Further critiques of this case study site that could contribute both to the centre itself and expanding theoretical discussions in ECE include: that not all educators on were on board ECEfS at the same time although this had changed over time
- the different levels of understanding of depth of ECEfS within staff
- having to justify to the school board when introducing sustainable equipment and ideas.

The above points could be addressed by the leadership team by supporting professional learning, allowing time for practices to evolve and providing enriching experiences for educators to hone their skills.

5.2.4 Theory about Quality in ECEC

In Chapter Two, quality ECEC is defined as having elements of both structural and process quality. At Green Leaf ELC there were highly trained educators who demonstrated excellent reciprocal relationships with children, their families and community, allowing for co-construction of learning (Sylva, 2012). These high quality relationships may have provided the children with the opportunity to develop optimally across the range of developmental domains such as physical, cognitive (including creativity and language), social, emotional and spiritual. This occurred within relevant and supportive frameworks and processes.
One implication of this study for the definition of quality ECEC is that from the present research and in the current political climate, there is ongoing contention about what constitutes quality ECEC, and it remains to be seen where this leads in the short and long term. Some authors are calling for an inclusive definition of quality where a global perspective is valued (SNAICC, 2014). Social justice principles of equity, diversity and supportive environments may need to be included in future quality ECEC definitions to enable the broader dimensions of sustainability to be represented. Hard, Press and Gibson (2013) state that “leaders who seek to engage diverse views to form a collective objective have the powerful potential to advocate for greater social justice” (p. 331). The implication for the NQS, the industry standard for quality ECEC, is discussed in the following section.

5.2.5 Policy implications

This research may inform future versions of the National Quality Standard and, therefore, educators’ new understanding of the full dimensions of sustainability and ECEfS. This may lead to continuous improvement in sustainability, ECEfS and pedagogical leadership. As outlined in the study, there are four dimensions of sustainability described in the literature; environmental, social, economic and political. The NQS emphasises only one of these: the environmental dimension. Environmental sustainability is mentioned explicitly in one of the seven Quality Areas only – Quality Area 3: The Physical Environment in the 2012 NQS and has been removed in the revised 2017 NQS however in further editions of the NQS all four dimensions of sustainability could be included. This would broaden the understanding of educators about sustainability, moving them beyond environmental sustainability. Pedagogical practices in ECEfS could therefore be expanded to include the four dimensions. Elliott and McCrea (2016) state that “an exemplary sustainable early childhood service could be… characterised by confident and knowledgeable educators who readily translate their understandings about sustainability into pedagogical practice” (p. 87). A policy implication for future versions of the NQS may be that a wider definition of sustainability and ECEfS practices may be aspired to. ECEfS may then be dispersed across all Quality Areas rather than being represented in only one.

A further policy implication of this study for ECEC leadership is that future versions of the NQS should indicate that the educational leader needs to articulate a clear vision for the centre as it was clear from the research that this was a critical component of SPLE. At present and in the revised NQS, Element 7.1.4 asks that the Educational Leader “sets goals for teaching and learning” (ACECQA, 2013, p. 172) and does not mention a vision statement for the centre or Educational Leader.
The Guide to the NQS (ACECQA, 2013, pp. 165-166) states that effective leaders contribute to a positive organisational climate, fully understand the education and care context, empower others, adapt to change and drive continuous improvement and establish skilled workforces. This part of the document does not acknowledge that all staff members can take on leadership roles, therefore distributed leadership approaches including positional and non-positional leadership are not emphasised. There is only one reflective question in the Guide to the NQS document that begins to recognise distributed leadership stating “How can we develop the skills and capacity of team members in a way that leads to improved shared leadership?” (p. 168). An implication of this study for future NQS revisions is that a distributed leadership model may be overtly recommended and a more focussed definition of ECEC leadership may be put forward such as the one suggested earlier – SPLE. This definition of ECEC pedagogical leadership is in contrast to traditional hierarchical leadership typical of school leadership (Hard & O’Gorman, 2007) and may influence how leadership is enacted in the future in before school settings as well in the first years of school.

A further implication from this study is that, for the EYLF, sustainability should be emphasised in all principles, practices and outcomes rather than in one outcome. Elliott (2014) shows how this can occur by linking the EYLF to the ARIES key principles of ECEfS of transformation and change, education for all and lifelong learning, systems thinking, envisioning a better future, critical thinking and reflections, participation and partnerships for change.

Another implication arising from this study for ECEC leadership is that professional learning needs to be examined for relevance and effectiveness toward quality outcomes in ECEfS. Green Leaf ELC’s professional learning program was varied and comprehensive. A study of the most efficient breadth, type and mix of professional learning could inform the field of best options for educators.

A final implication for policy is that the NQS notion of quality could be broadened to encompass a global view where social justice principles of equity, diversity and supportive environments are imbued.

As well as a broader global view of quality, a contextual view of quality may need to be embraced in the NQS. Advocacy for quality in the context of individual centres undertaking the NQS Assessment and Rating process could be conducted by the leadership. Perhaps a formalised vehicle in which leaders can do this needs to be made available so that implementing the NQS is more equitable for all participants resulting in a fairer and more accurate system of assessment.
and rating. Future NQS revisions may therefore prove to be a more relevant and sustainable document for the ECEC profession.

5.2.6 ECEC Practice implications

This study has highlighted that sustainability has broader application in ECEC than is currently being implemented through the 2012 NQS or being proposed in the 2017 NQS changes. By broadening the understanding of the scope of ECEfS to include all four dimensions of sustainability, ECEfS pedagogical practices can be expanded to be more inclusive of the full definition of sustainability. Social justice principles of equity, diversity and a more supportive environment may result as the NQS becomes more inclusive and relevant to all ECEC centres.

To demonstrate how this could occur, examples of how the environmental, social, economic, and political sustainability dimensions can be incorporated throughout the NQS are offered:

Quality Area 1: Educational Program and Practice, could mention that providing a good quality program for children is an example of social sustainability as children’s learning is encouraged now and for the future. Children can be immersed in a program embedding environmental practices which include economic decisions about how resources are used. The EYLF, the approved national curriculum framework, applied in this Quality Area is an example of governance as it forms part of the legislated regulations for ECEC and therefore is an example of the political dimension of sustainability.

Quality Area 2: Children’s Health and Safety, works toward ensuring children have good mental and physical health now and in the future as an example of social sustainability.

Quality Area 3: Physical Environment, includes making access available for all children to the centre facilities making this an example of social justice and social sustainability.

Quality Area 4: Staffing Arrangements, shows that a collaborative, supportive and respectful workplace can support social sustainability. Educators can be responsible for thoughtful use of resources (economic and environmental sustainability) and ratios and qualifications are specified in the regulations (political sustainability).

Quality Area 5: Relationships with Children when encouraged and nurtured support social sustainability as friendships are nurtured and family members are encouraged to mix.

Quality Area 6: Collaborative Partnerships with Families and Communities includes links and partnerships which will enhance relationships and be socially sustainable.
Quality Area 7: Leadership and Centre Management can lead to a positive organisational climate where educators feel supported toward continuous improvement. These collegiate relationships support social sustainability. Governance and organisation by the centre leadership is an example of political sustainability.

Incorporating and specifically highlighting the four dimensions of sustainability in the NQS would show educators the full potential of incorporating ECEfS into centre operations at all levels in all areas and hence enhancing the quality of the service overall.

5.2.7 Implications for ECEC Leadership

This study has highlighted the unique characteristics of leadership in the ECEC field as being distributed, collaborative, transformational and catalytic.

As discussed earlier, the term SPLE with a strong emphasis of social justice described what is occurring at the case study centre and, in turn, this could provide a model for ECEC specifically. As well as incorporating the four dimensions of sustainability in ECEfS at the centre, these same dimensions were applied to the educators by the leadership team:

- socially, in a vast array of meaningful team building events, a supportive physical environment in which to work and professional learning opportunities inside and outside the work environment,

- economically, by offering remuneration over award conditions and providing benefits such as free uniforms, paid professional learning and in the case of the Educational Leader paid holidays, and provision of resources as required,

- environmentally, by providing a supportive physical environment such as a purpose built centre including many environmental features, access to larger grounds and sustainable practices such as thoughtful use of office supplies and equipment, and

- politically, in the form of governance and organisation in a cycle of continuous improvement to the point where enculturation of ECEfS was occurring and the staff team was very consistent. Consistency resulted in educators having longevity of employment as well as in their shared values regarding ECEfS. In the Early Years Workforce Study it was found that “twenty percent of educators (1:5) responding to the national survey intended to leave their centre in the next 12 months” (Irvine, Thorpe, McDonald, Lunn, J, & Sumsion, 2016, p. 4) so this is a significant issue in the ECEC field.
5.2.8 Suggestions for future research

In this section, I discuss some possibilities for future research into leadership resulting in quality ECEfS. Such future research may build on the findings of this study, or present new areas for investigation.

Research into leadership types, especially the new term of SPLE, may result in new types of leadership specific to the field. SPLE acknowledges the dynamic nature of the role and that through leadership a centre can reach a higher plane of pedagogical practices. Leadership definitions may include elements of participation and working closely with and showing empathy for educators, children and families. Providing inspiration within and outside the centre for participants may be included in ECEC leadership definitions as well as creativity and innovation in implementing pedagogical practices. Research at additional case study sites could examine the enactment of holistic, dynamic leadership which may influence the current role of leaders and become a relevant style for ECEC leaders specifically. Research at sites could be conducted to show how leadership with a strong social justice emphasis can pervade leadership actions encompassing principles of equity, diversity and a supportive environment. It may show that centres with SPLE have higher staff retention rates leading to a higher chance of educators moving from novice to expert in their role. High quality encultured practices may therefore evolve.

Further research may be conducted into the role of the pedagogical leader in terms of EfS specifically the professional learning requirements of leaders and educators in terms of EfS. Investigation into a more inclusive and broad ranging definition of quality which is context based and represents the diversity of centres could be beneficial. An expansion of the inclusion of children’s voice driving and leading pedagogical practices will adhere more closely to the principles of ECEfS. Research into children as sustainability leaders may illuminate possibilities for ECEfS.

A further area that could be studied that has an influence on ECEC quality is the influence of peers on the quality of the children’s learning experiences in a centre. Shagers’ (2012) doctoral thesis, based on data from the 2003 Head Start Family and Child Experiences (FACES) study, a nationally representative survey of children who entered Head Start in 2003 in the USA, found that peers could have a positive influence on academic and behaviour skills development, as well as preschool classroom process quality. EfS principles (DET, 2009) recognise participation in engaging groups and individuals and that genuine partnerships that build networks and
relationships are critical to the success of an EfS program. In fact, children themselves may become leaders of, and influence others, in the EfS process.

At Green Leaf ELC, the centre’s pedagogical practices in relation to sustainability ranged outside the scope of the NQS to where they were enculturated at the centre. Future plans showed that the centre was destined to push the boundaries even further. Additional research at this specific site could examine further the pedagogical practice possibilities of ECEfS especially in regard to the four dimensions of sustainability and how pedagogical leadership informs and supports educators in this process.

5.2.9 Conclusion

This qualitative, historic case study sought to discover how ECEfS was understood and enacted in an ECEC centre as a response to the introduction of the 2012 NQS. The influence of the pedagogical leaders at a single site to inform and support this process was investigated. The study commenced just as the NQS was being introduced for the first time in Australia and when ECEC centres were grappling with how to engage in the process of continuous improvement required by the standard. For the purpose of this study, pedagogical practices in ECEfS were specifically targeted to demonstrate that high quality practices can be achieved where strong leadership occurs. Indeed, this research has shown that exceptional results can occur even in a new centre where systems, the physical environment and processes are only just being established.

This study set out to investigate the pedagogical leadership evident in embedding ECEfS as they implemented the NQS. The understanding and enactment of ECEfS by leaders and educators was explored. How the educators were informed and supported by the pedagogical leaders was examined. It was found that a unique style of leadership was present at the case study site, coined SPLE, by the researcher. This sustainable leadership approach informed and supported educators in enculturating, ECEfS at the centre leading to the centre exceeding expectations of the 2012 NQS in the areas of ECEfS and ECEC leadership. SPLE may serve as a new way for leadership to be enacted in the ECEC field leading to high quality practice and learning outcomes for young children in ECEfS as well as all aspects of the program.
Bibliography


Solly, K. (2003). *What do early years leaders do to maintain and enhance the significance of the early years? A paper on a conversation with Kathryn Solly held at the Institute of Education, University of London, 22 May.*


UNESCO. (2005). *Four Dimensions of Sustainable Development*. Retrieved from [http://www.unesco.org/education/tlsf/mods/theme_a/popup/mod04t01s03.html](http://www.unesco.org/education/tlsf/mods/theme_a/popup/mod04t01s03.html)


Appendices

Appendix A

Interview questions

Interview for the Director

Preamble re documents

For this interview I will access to the following documents and any previous copies from 2012 until present:
Prospectus, Mission statement, Vision statement, Philosophy, Sustainability Policy, Quality Improvement Plan

Orientation questions: How long have you been working at this service? What positions do you hold at the service? How has this changed in your time here? How would you describe your leadership?

1. What is your understanding of the term Early Childhood Education for Sustainability?
2. What is your understanding of the term 'quality embedded Early Childhood Education for Sustainability'?
3. What are some examples of Early Childhood Education for Sustainability in the service?
4. Can you provide examples from the 3/4 pillars of sustainability?
5. Were these examples initiated by you?
6. What part did other educators play in these examples?
7. How has your leadership informed educators in embedding Early Childhood Education for Sustainability?
8. How has your leadership supported educators in embedding Early Childhood Education for Sustainability?
9. How has your leadership limited educators in embedding Early Childhood Education for Sustainability? How have your leadership actions changed over your term at the service? What future plans do you have for embedding quality Early Childhood Education for Sustainability in the service?
Interview Questions for Early Childhood Centre Key Educators

I will ask educators to share any planning for Early Childhood Education for Sustainability from 2012 to the present

Orientating questions: What is your position in the service? What age group are you working with? What is your qualification? What are your years of experience? How long have you worked in this service?

1. What does the term Early Childhood Education for Sustainability (ECEfS) mean? What is your understanding of the term ‘embedding’ ECEfS?
2. Have you had any previous experience in embedding ECEfS in another service?
3. At this current service, what are some ECEfS practices that you have implemented in the past or that the service is currently implementing? Provide examples
4. What are some ECEfS practices that you have personally initiated and implemented? Provide examples
5. What role did the Educational Leader play in informing you about ECEfS?
6. What support has the Education Leader offered/is offering you to implement ECEfS? E.g. Training, arranging PD
7. Were there any Educational Leader’s actions that inhibited your ability to embed ECEfS in the service?
8. What additional actions could the Educational Leader take to ensure embedding of quality ECEfS in the service?
9. What are some of the future projects you are planning to embed ECEfS in the service?
10. Anything else? .......
Interview for Pedagogical Leader

PREAMBLE

I will ask the Educational Leader (pedagogical leader) for her plans and notes from 2012 until the present in regard to implementing quality Early Childhood Education for Sustainability in the service.

Orientation questions: How long have you been working at this service? What positions do you hold at the service? How has this changed in your time here?

1. What is your understanding of the term Early Childhood Education for Sustainability?

2. What is your understanding of the term quality embedded Early Childhood Education for Sustainability?

3. What are some examples of Early Childhood Education for Sustainability in the service?

4. Can you provide examples from the different pillars of sustainability? Were these examples initiated by you? What part did other educators play in these examples?

5. How would you describe your pedagogical leadership at the service?

6. How has your pedagogical leadership informed educators in embedding Early Childhood Education for Sustainability?

7. How has your pedagogical leadership supported educators in embedding Early Childhood Education for Sustainability?

8. How has your pedagogical leadership limited educators in embedding Early Childhood Education for Sustainability?

9. How have your pedagogical leadership actions changed over your term at the service?

10. What future plans do you have for embedding quality Early Childhood Education for Sustainability in the service?
Appendix B

What does sustainability mean to us? What do we do already?
Appendix C

Caring for the environment policy

5.4 Caring for the Environment (including animals) Policy

Policy Statement
At [school name], we endeavour to promote a greater understanding of environmental issues in Team Members, parents and children. This is achieved through actively recycling, promoting the responsible use of water and using chemicals in a responsible manner. Pets and animals complement the service program by promoting children’s knowledge and skills in a variety of ways and allowing hands on, concrete experiences in many concepts.

Policy Guidelines
We adhere to the following guidelines in preserving our natural heritage:
1. Recycling: At [school name], we attempt to recycle all suitable products, i.e. all glass jars, bottles, aluminum cans, steel cans, paper, cardboard, and plastic packaging.
2. Centre Educators need to work with the children and families at the Centre to develop an individual recycling program for the Centre.
3. The following procedure is observed in order to minimise pollution of water systems.
   Use sink sieves for holding solid matter from going into the drain.
   Wrap paints, glue oits, fats etc. in newspaper before disposing in the garbage can.
   Minimise the use of vinyl paint.

Pets & Animals
1. Families will be informed if we have pets in our service by way of posters/newsletters and or emails.
2. Families will be notified in advance when we have visits from mobile animal exhibitors – including chicken hatching program.
3. Educators will take responsibility for any animal which becomes a part of the program as a pet. This will include:
   - ensuring that the animal is suitably housed at all times,
   - regular cleaning of the animal’s housing,
   - ensuring that the animal is not taken into areas of food preparation, storage or serving,
   - encouraging the children to participate in caring for and feeding of the animal under supervision.
4. Educators, children and families will be encouraged to participate in caring for the animal on a regular basis. Such arrangements will include the care of the animal on weekends and when the service is closed.
5. Educators will consider fears of children or allergies to pets, when pets are purchased for kindy or when pets or animals visit.
6. Children and educators will wash hands or use sanitise hand wash after handling animals.

Please Note: All Educators must be aware of and adhere to the appropriate childcare regulations at all times.

Communicating Policy to Families, Children and Staff
Information relating to the Caring for the Environment (including animals) Policy is communicated in the following ways:
- Newsletters
- Parent and staff handbooks
- Team meetings and memoirs
- Planned experiences for the children
- Notice boards and posters
- Pamphlets and Information sheets in the foyer
- Role modelling and signs displayed around the classrooms and centre etc.

Policy Review Statement
All policies will be reviewed timely in consultation with Families, Staff and Management. Any changes in legislative, regulations, Quality Assurance and other standards will be considered in the reviewing process. Any changes in policies or procedures will be communicated to families and staff verbally and in writing.

POLICY No.: Caring for the Environment Policy

Last Revision Date: August 2015 Next Revision Date: August 2015 Authorised By: Management

Link to NQS: QA 3.3, 3.3.2

SUSTAINABLE PEDAGOGICAL LEADERSHIP IN EARLY CHILDHOOD EDUCATION AND CARE: IMPLEMENTING THE 2012 AUSTRALIAN NATIONAL QUALITY STANDARD

166
### Quality Area 3

#### QA3 Physical environment

<table>
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<tr>
<th>Element</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3.1.1</td>
<td>Outdoor and indoor spaces, buildings, furniture, equipment, facilities and resources are suitable for their purpose.</td>
<td>Met or Not met</td>
<td>Met</td>
<td></td>
</tr>
<tr>
<td>3.1.2</td>
<td>Premises, furniture and equipment are safe, clean and well maintained.</td>
<td>Met</td>
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<td></td>
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<tr>
<td>3.1.3</td>
<td>Facilities are designed or adapted to ensure access and participation by every child in the service and to allow flexible use, and interaction between indoor and outdoor space.</td>
<td>Met</td>
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</table>

#### 3.1 Exceeding NQS

3.2 The environment is inclusive, promotes competence, independent exploration and learning through play.

<table>
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<tr>
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<tbody>
<tr>
<td>3.2.1</td>
<td>Outdoor and indoor spaces are designed and organised to engage every child in quality experiences in both built and natural environments.</td>
<td>Met or Not met</td>
<td>Met</td>
<td></td>
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<tr>
<td>3.2.2</td>
<td>Resources, materials and equipment are sufficient in number, organised in ways that ensure appropriate and effective implementation of the program and allow for multiple uses.</td>
<td>Met</td>
<td></td>
<td></td>
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#### 3.2 Exceeding NQS

3.3 The service takes an active role in caring for its environment and contributes to a sustainable future.

<table>
<thead>
<tr>
<th>Element</th>
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<tbody>
<tr>
<td>3.3.1</td>
<td>Sustainable practices are embedded in service operations.</td>
<td>Met or Not met</td>
<td>Met</td>
<td></td>
</tr>
<tr>
<td>3.3.2</td>
<td>Children are supported to become environmentally responsible and show respect for the environment.</td>
<td>Met</td>
<td></td>
<td></td>
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</table>

#### 3.3 Meeting NQS

Quality Area 3 rating: Exceeding NQS

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**National Quality Standard Assessment and Rating Report**
Quality Area 7

QA7: Leadership and service management

<table>
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<td>Met</td>
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<td>Met</td>
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<td>7.1.5</td>
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<tr>
<td>7.1</td>
<td>Exceeding NQS</td>
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7.2 There is a commitment to continuous improvement.

<table>
<thead>
<tr>
<th>Element</th>
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<tr>
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<td>7.2</td>
<td>Exceeding NQS</td>
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7.3 Administrative systems enable the effective management of a quality service.

<table>
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<td>Met</td>
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<tr>
<td>7.3.4</td>
<td>Met</td>
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<td>7.3.5</td>
<td>Met</td>
</tr>
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<td>7.3</td>
<td>Exceeding NQS</td>
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Quality Area 7 rating: Exceeding NQS
Appendix E

Quality Improvement Plan for Q13 - 2015

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<th>Regulation</th>
<th>Requirements</th>
<th>Strategy</th>
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<td>4.6.5</td>
<td>Service aware and responsive to children's needs</td>
<td>Enhanced communication about the learning environment and care services priorities</td>
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<td>5.2</td>
<td>Addressing awareness about educational and care service premises</td>
<td>Improved feedback from parents and staff</td>
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<tr>
<td>13</td>
<td>Part of the National Law Service Agreement</td>
<td>Regular updates on legal compliance</td>
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<tr>
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<td>Field requirements</td>
<td>Continual monitoring and evaluation</td>
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<tr>
<td>-------</td>
<td>------------</td>
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</tr>
<tr>
<td>Implement the 2012 Australian National Quality Standard</td>
<td>Develop an action plan</td>
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<td>Ensure all staff are familiar with the new requirements in our early learning centre</td>
<td>Train staff on new requirements</td>
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</tr>
<tr>
<td>The need for greater engagement in our environment</td>
<td>Increase staff participation in meetings</td>
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<tr>
<td>The need for more training in the regulations</td>
<td>Provide additional training sessions</td>
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**Key Improvements Sought for QAS**

*Version 1 2013*
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<th>Description</th>
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<tbody>
<tr>
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<td>Overview of the framework</td>
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<td>Leadership and governance</td>
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<td>Strategic planning and decision-making</td>
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<td>Continuous improvement and evaluation</td>
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<td>Results and impact</td>
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<td>8</td>
<td>Appendices and resources</td>
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The table above outlines the key components of the Sustainable Pedagogical Leadership in Early Childhood Education and Care framework. Each row describes a specific area of focus, from overview to results and impact, ensuring comprehensive coverage of the standards and outcomes expected under the 2012 Australian National Quality Standard.
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<td>Reflection</td>
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<td>Action Plan</td>
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<td>Standard</td>
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**SUSTAINABLE PEDAGOGICAL LEADERSHIP IN EARLY CHILDHOOD EDUCATION AND CARE: IMPLEMENTING THE 2012 AUSTRALIAN NATIONAL QUALITY STANDARD**
Appendix F

Our commitment to sustainability
Appendix G

Centre philosophy statement

Philosophy Statement

A school community built on Christian Values that nurtures individuals and inspires quality learning.

In Relation to Children

- To ‘know’ children – know their name, know how they settle in to the day, and know their family.
- To encourage and support development of creativity, initiative and self-reliance in an atmosphere of trust and structured freedom.
- To encourage and support play and appreciate play as a child’s way of learning.
- To ensure that all aspects of a child’s development needs are programmed for and periodically assessed.
- To respect that children learn most effectively when they feel positive about themselves, this is achieved by acknowledging children’s strengths, showing love and having positive interactions with children.
- To provide a rich learning environment (one deliberately designed with much to explore and discover) it will be ‘home-like’ that is warm and welcoming, children will have a sense of ownership and develop independence.
- To provide age appropriate experiences in an unhurried atmosphere.
- To appreciate and respect that children are naturally curious and eager to learn and they learn best when they are able to follow many of their own interests and desires to learn.
- To create an environment for the children that embraces sustainability and to remind children often on the importance of our Earth and how to care for it.
- To ensure that as individuals, no child is discriminated against, with all staff respecting the values, attitudes and cultural beliefs of all families in the best interests of their children.
- To ensure through our programs all children are treated individually, regardless of age, gender, race, religion, language and ability.

In Relation to Families

- To involve parents in a partnership of decision making regarding various Early Learning Centre policies and procedures.
- We will ensure the Centre is a welcoming and trusting environment for families. Families will know their children are safe.
- Support the families of the Early Learning Centre which can be represented in many forms, be respectful of the choices that they make when balancing work and family life.
- To encourage families to have an active role in the Centre by helping when they can in any role they feel comfortable.
- To respect and be aware of families cultures and needs and be sensitive to their differing beliefs.
- To provide information to families about the Centre and their child’s day through newsletters, memos, resources, programs, suggestions books/boxes, what we did today sheets and more.

In Relation to the Community

- To be advocates on behalf of young children and develop an understanding of the importance of Early Childhood in all people’s lives.
- To promote community awareness and understanding of quality children’s services.
- To invite members of the community into our Centre for educational experiences. This includes dental nurses, community health nurses, police, fire and ambulance officers.
- To liaise with the including the College and Church, and to also liaise with the local TAFE and Universities.

In Relation to Educators

- We believe quality Educators are paramount to a quality early childhood program.
- We promote the need to work as a team to create an environment of skill and knowledge in early childhood.
- To create a working environment that is fun and flexible and a high quality service.
- To provide secure, supported employment through sound industrial rights, conditions and personal practices.
- To promote ongoing training and professional enrichment to all team members.
Appendix H

Outdoor educator questionnaire example

Outdoor Environment  14/10/15  Rachele M.

Role of outdoor educator
- knowledgeable, energetic, enthusiastic, Patsch/Sterne, culturally sensitive

What would support role of outdoor educator?
- resources, time, teammanship, environment, connection

What content is covered in the pedagogy of outdoor curriculum?
- sustainability, involved learners, child interests, open-minded, risk-taking

Changes you want to make to environment!
- rocks, exploration areas, natural resources, clean, involved educators

Describe your ideal outdoor place?
- treet woodland, backyard, rocks, water
Appendix I

Educational Leader’s Vision Statement

**Educational Leader Vision Statement 2016**

- Support educators in their roles
- Encourage reflective practice
- Guide current practice
- Be available to educators
- Role model appropriate interactions and programming methods
- Engage in Pd’s & share findings /interesting facts/ current practice