Chapter 2

Quality in early learning centres – investigating the literature

2.1 INTRODUCTION

The purpose of this chapter is to provide a review of the literature on quality in early learning centres. I start the chapter exploring the demand for high quality service provision in early childhood. Next, I review the discussions and debates on "quality" in early childhood education and then commence by explaining the theoretical framework underpinning this study. I further explain what early learning centres are and who they are for. A discussion on children's learning, the role of play in early learning centres, the curriculum and learning environment is followed by the contentious debate of the play-based approach versus academic direct instruction. The last part of this chapter explores the measurement of quality in early learning centres, specifically how quality assurance frameworks originated, developed and are functioning in different parts of the world. I conclude the chapter by investigating quality in early learning centres in South Africa.

2.2 THE NEED FOR SERVICE PROVISION IN AN EARLY LEARNING ENVIRONMENT

> *It has become a fact of modern, industrialized life that many young children spend the majority of their waking hours being taken care of in groups outside their homes by someone who is not their parent (Becker & Becker, 2009: ix).*

The statement above expresses the reality of young children's position in society today, world-wide, as well as in South Africa. "Women's increased employment since the last half of the 20th century has been a contributory factor for increased early years provision in terms of demand and availablility" (Papatheodorou, 2010: 1).

Kamara (2008: 103) and Clasquin-Johnson (2009: 18) acknowledge that there is a growing demand for high quality early education and care because of an increasing number of single–parent families as well as households where both parents are working full time. Additionally, parents are constantly reminded by the media of challenges that the formal education system faces. Parents' hopes and expectations are consequently on the early learning centres to provide quality preparation for their children before they enter school. There is thus an urgent need not only for more, but for higher quality early learning centres globally and also in South Africa (Clasquin-Johnson, 2009: 18).

Since the last part of the 20th century, research findings have been increasingly cited to support the expansion of early childhood care and education. In many early childhood professionals' view, the quality of child care impacts on children's performance and behaviour during the time spent in early learning centres, but also potentially for several years afterwards (Bredekamp, 2011: 11; Essa, 2011: 157). There is now indeed, a growing body of evidence which has demonstrated the long term benefits of high quality early services for young children, their families and the wider community (Papatheodorou, 2010: 1). At a global level, numerous studies have indicated that attending a high quality early childhood programme has a range of noteworthy advantages for children, families, and the entire society, including taxpayers. Such quality programmes are not only an investment in young children, but are also beneficial in expanding their physical, cognitive, and social environment (Hirsh-Pasek, Michnick Golinkoff, Berk & Singer, 2009: 22; Lynch, 2007: 6; Papalia, Olds & Feldman, 2008: 288; Papatheodorou, 2010: 1).

In their revised project plan, "Encouraging quality in early childhood education and care", the Organization for Economic Cooperation and Development (OECD) (2009: 3) emphasised that all these positive advantages including social and economic benefits, better child well-being, "more equitable outcomes, poverty reduction and increased intergenerational social mobility" are directly related to the "quality" of early childhood education and care.

The need for child care among working parents makes early childhood education a topic of international and national importance, but this is not the only rationale for its

growing significance. Essa (2002: 5) emphasises that on a parallel, though separate, track there has been extensive debate and research regarding early education for special populations of children and families, in particular children from low-income families, children with disabilities, and children at risk. South Africa has many children that fall into one or more of these categories. Researchers have concluded that good early childhood programmes not only improve the lives of children and families involved but also result in considerable economic advantages for society (Essa, 2002: 5).

The early years in children's lives are of vital importance for the rest of their lives. This statement that is true for all children is also specifically relevant to children growing up in countries with emerging economies. The last few decades were characterised by extensive research that signifies that children's ability to grow up healthy and to learn effectively, to a large extent relies on their experiences and relationships in the earliest years of their lives. Young South African children face tremendous challenges in terms of their survival, development and well-being because of the demands of poverty, unemployment as well as the effects of HIV and AIDS. There is increasing recognition that practical and efficient solutions are urgently required to address the needs of today's and tomorrow's most vulnerable children in South Africa. "Positive early learning experiences will lay the foundation for a lifetime of success... High quality, effective services are needed for those young children who are competent, yet at risk for compromised development" (Rochat, Mitchell & Richter, 2008: 4–5).

2.3 QUALITY EARLY CHILDHOOD EDUCATION

In recent years, in many countries with well-developed or developing early childhood education systems, the "quality-issue" has become a matter of considerable apprehension. The past decade offered an assortment of reviews, public policies, investigations and research "into what should constitute quality in early childhood education and care" (Ishimine, Tayler & Bennett, 2010: 67).

2.3.1 Defining "quality" in early childhood education

Kostelnik, Soderman and Whiren (2004: 8) point out that the term "quality" is often used by early childhood professionals for describing their programmes. They argue that regardless of families' background or economic status, the quality of their children's education and care is a big concern for parents (Kostelnik *et al.,* 2004: 8). According to Essa (2011: 156), numerous studies found a connection between high quality child care and learning, intellectual and language development and performance in school. The positive effect of high quality early childhood programmes is even more noticeable in children from lower-income families (Decker & Decker, 2005: 23).

Although the significance of quality in terms of the provision of early childhood education is recognised and well documented, no single definition exists to capture and represent exactly what quality in early childhood education provision means. The idea of a universally agreed-upon standard of quality has been discarded (CECDE, 2004: 19). Various countries and different stakeholders define quality differently, therefore "definitions should be interpreted with caution and sensitivity when comparing cross-country practices" (OECD, 2009: 13). Moss and Pence (1996) state that in defining quality, the relevance of the cultures and contexts that vary to accommodate the wide variations in economic development, resource availability, and cultural beliefs, will be reflected. Any particular society's definitions of quality will be informed by their cultural values and constructions of childhood. The concept of quality therefore "always needs to be contextualised ecologically and temporally to recognise cultural and other forms of diversity" (CECDE, 2004: 19).

Moss and Pence (1996) also emphasise that most perspectives on quality are exclusive to a particular stakeholder group. In their opinion, "quality in early childhood services is a constructed concept, subjective in nature and based on values, beliefs and interest, rather than an objective and universal reality". They further argue that "quality childcare, is to a large extent, in the eye of the beholder who can be anyone or belong to any group, each with an interest in early childhood services" (Moss &

Pence, 1996: 172). Ebbeck and Waniganayake (2003:109) add weight to this opinion and provide an even more detailed division of four categories of the stakeholder groups namely the individual (child, parent, professional), organisational (centre, programme, sponsor), community (local, regional, national) and international (cross-cultural, global alliances such as the European Union (EU) and the Association of South-East Asian Nations (ASEAN))

For Katz (1993), quality can be determined from five angles, namely top-down (such as equipment and setting), bottom-up (the experience of the child), outside-inside (the experience of the family), inside (the experience of the staff) and outside (the programme in relation to the community). When compared, the two perspectives on quality early childhood education of Katz (1993) and Ebbeck and Waniganayake (2003:109) show considerable overlap. See Table 2.1 below.

Table 2.1: A comparison of two perspectives on quality

Katz	***Ebbeck and Waniganayake***
Top-down	Organisational
Bottom-up	Individual (Child)
Outside-inside	(Family)
Inside	(Staff/professional)
Outside	Community
	International

It should be noted that the category labelled “outside” by Katz, creates space for the two categories “community” and “international” proposed by Ebbeck and Waniganayake. On the other hand, Ebbeck and Waniganayake’s category “individual” (containing child, parent and professional) creates space for three separate categories proposed by Katz, namely “bottom-up”, “outside-inside” and “inside”.

It is important to note that because of the complexity of quality and the entangled connections between these many variables “… quality cannot be defined by listing its components separately” (Golberg, 1999: 21).

Dahlberg, Moss & Pence (2002: 93) argue that:

> *The concept of quality is primarily about defining, through the specification of criteria, a generalizable standard against which a product can be judged with certainty. The process of specification of criteria, and the systematic and methodological application, is intended to enable us to know whether or not something – be it manufactured or service product – achieves the standard. Central to the construction of quality is the assumption that there is an entity or essence of quality which is a knowable, objective and certain truth waiting 'out there' to be discovered and described.*

I agree with Dahlberg *et al. (2002: 93)* above who say that, to some extent, quality can be judged, but only through a process where the set criteria can be applied to "test" the concept. To achieve this one requires a theoretical framework.

2.4 THE THEORETICAL FRAMEWORK UNDERPINNING THIS STUDY

In order to understand generated data in terms of quality, I selected the model of Woodhead (1996) on quality development, as a basis to inform a possible framework for the South African context in early learning centres. Martin Woodhead, a developmental psychologist, developed this model in 1996.

In Woodhead's project, four case studies were carried out by local consultants in India, Kenya, Venezuela and France. These studies emphasise the extraordinary diversity in environments for early child development, in contrasting economic and cultural circumstances and focus on different models of early childhood programmes. Woodhead offers a view of quality issues in large-scale programmes for young, disadvantaged children growing up in poverty. The South African context bears resemblances with the contexts of the countries of Woodhead's project. Kenya, for example is also an African, developing country. By opting for Woodhead's framework, I attempt to avoid one of the pitfalls against which Woodhead (1996: 5) warns us:

> *There is a strong tendency for Euro-American models of quality to dominate research, policy, training, and practice in early childhood development. With a few notable exceptions, this tendency has been fuelled by the universalist aspirations of developmental psychology. I am convinced that universal models of quality are both untenable and unhelpful. At the same time, I am convinced we should not embrace the opposite extreme, an ultimately self-defeating form of relativism. Quality is relative, but not arbitrary.*

Woodhead's model on quality development is based on three key questions:

1. Who are the stakeholders in the quality of a programme?
2. Who are the perceived beneficiaries from quality?
3. What are taken to be indicators of quality?

The framework consists of quality indicators grouped under three broad categories consisting of input, process and outcome indicators.

Table 2.2 provides a schematic layout of the main features of my theoretical framework based on Woodhead's model for conceptualising quality in early learning centres. When I consulted different sources, I realised tenets of Woodhead's framework (on quality in early learning centres) were mostly included, although using alternative terms or additional indicators. In order to create a more complete understanding of the indicators, I include an extra section (printed in italics) to compare Woodhead's framework with those of three other sources (Dahlberg, Moss & Pence, 2002; Goodfellow, 2003; OECD, 2009) that were published later. The similarities between the four sources are evident. The most noticeable difference is that the indicator *curriculum* is not part of Woodhead's framework, but is explicitly stated in all three of the other sources.

Table 2.2: The theoretical framework for indicating quality in early learning centres

1. Stakeholders in the 'quality' of programmes	**2. Beneficiaries from 'quality'**
• Children • Parents • Employers • Teachers • Programme managers • Community leaders • Child development experts • Politicians • Funding agencies • Research investigators	• Children • Parents • Employers • Teachers in the primary school • ECE workers • Older children (do not have to care for younger siblings)

3. 'Quality' indicators		
INPUT indicators: easy to define and measure	**PROCESS indicators:** reflect relationships and day-to-day interactions	**OUTCOME indicators:** reflect the impact of using services
Building and grounds • floor space • toilets • heating / cooling **Materials and equipment** • toys • furniture • teaching resources **Staff** • qualifications • wages and conditions • child/staff ratios	**Style of care** • adult's responsiveness • consistency **Teaching learning methods** • cater for individual needs • control/support **Experiences offered** • choices • variety • routines and transitions **Control and discipline** • boundaries • rules • management **Relationships among adults** • respect • trust **Relationships between staff, parents and others** • open • welcoming • cooperative	**Children's health** • growth levels • illness **Abilities** • overall skills and development **Adjustment to school** • transition and achievements in school **Family attitudes** • parent competence • support for children's learning at home

(Adapted from Woodhead, 1996: 23-25)

4. Alternative terms and/or additional indicators used by other authors		
Structural variables • *adult/child ratios* • *group size* • *staff training* *(Goodfellow, 2003: 1)*	***Process variables*** • *sensitive responsive care-giving* • *the nature of the parent/staff cooperation* • *implementation of the curriculum* *(Goodfellow, 2003: 1)*	
Structural (input) criteria *Resource and organisational dimensions of institutions:* • *group size* • *levels of staff training* • *adult–to–child ratios* • *the presence and content of a curriculum* *(Dahlberg, Moss & Pence, 2002: 98)*	***Process criteria*** *What happens in the institution?* • *activities of children* • *behaviour of staff* • *interactions between children and adults* • *relationships between the institution and the parents* *(Dahlberg, Moss & Pence, 2002: 98)*	***Outcome criteria*** • *child development assumed to be desirable, but also to young children's later school* • *social & economic performance sometimes stretching as far as adulthood* *(Dahlberg, Moss & Pence, 2002: 98)*
Input indicators *(on programme level)* • *duration and intensity of programmes* • *size and composition of groups* • *adult-child ratios* • *indoor and outdoor environments* *(OECD, 2009: 13–17)*	***Process indicators*** *What is occurring in programmes and to a child?* • *health and safety features* • *interactions between children and adults* • *partnerships with parents* • *relationships with children* • *learning and social opportunities offered (curriculum)* *(OECD, 2009: 13–17)*	***Outcome indicators*** • *well-being* • *socio-emotional developments* • *citizenship* • *preparation for school* *1. Goals in specific developmental areas (Physical & socio-emotional development)* *2. Subject & learning areas, e.g. communication and language skills, art, emergent literacy.* *- self regulation* *- ability to play co-operatively* *- language outcomes* *(OECD, 2009:13–17)*

The framework in Table 2.2 accommodates diverse views on quality. Parents may experience quality as their child's safety and a good meal. That represents the

parent's perspective as beneficiary, concentrating on happiness, social relationships and parental employment as indicators. The politician's view could represent a concern regarding numbers in the programme, cost effectiveness and global indicators of quality and here the community is the beneficiary. The care worker's perspective concentrates on the children as the main beneficiaries and the pressures of staff and adequacy of resources are perceived as the main concerns regarding quality. When children reflect on their own experiences of the programme and their likes and dislikes, their view of quality will also be acknowledged.

In comparison to Woodhead's theoretical framework, Ishimine, Tayler and Bennett (2010: 68) remark that researchers generally acknowledge that addressing quality in early learning centres can be accomplished if the two common types of quality, structure and process, are investigated. In their view *structure quality* usually refers to the facilities and resources, the staff-to-child ratios and staff qualifications at the early learning centres which are, in their opinion, "more easily measurable for cross-sectional observational purposes in determining quality". On the other hand, *process quality* focuses on the nature of human interactions between all the different stakeholders which impact on the everyday character of early learning centres and "directly influence the quality of a child's day-to-day experience. Such components are more constructive in nature and require more in-depth observations than structural quality" (Ishimine *et al.,* 2010: 68). This aspect will be explained in more detail in 2.6.1.

How can Woodhead's model be used? Woodhead explains that the model is intended "as the starting point for appraising a programme and negotiating its development with all the stakeholders who are interested and involved in it". He argues that it is not a top-down perspective, but an inclusionary model that "takes account of other perspectives, which discourages narrow prescriptions about what makes for a good programme, which goals are worth pursuing, and which criteria should be taken as indicators" (Woodhead, 1996: 25-26). I am of the opinion that this model provides an appropriate theoretical framework to explain the relationship and interdependency between the main features of my study.

With Woodhead and others I have argued above that determining the quality of an early learning centre should involve sensitivity to context. Contexts, in turn, are not stable but ever-changing. For this reason, I also take heed of Alcock's (1996: 2) views. He argues that "where pedagogues reflect collaboratively, consciously and critically on early childhood programmes and practices, quality evolves as an implicit part of the process of change."

A meaningful discussion of quality in early learning centres requires a clarification of the term "early learning centres". We also need to attend to issues such as who the learning centres are for, how children develop and learn, the role of play, as well as the curriculum and the learning environment.

2.5 EARLY LEARNING CENTRES

2.5.1 What is an early learning centre?

Throughout history, different professions like psychology, health and social work, education and special education informed the programmes of early learning centres. Various types of settings were used and centres and programmes were created to meet diverse needs of society, for example serving as 'substitute' parents and supporting children's socialisation and learning, offering safety, security and care for children while their parents were working and also supporting children with special needs. Consequently, early learning centres have regularly changed direction to reflect the diverse goals set by societies' needs (Decker & Decker, 2005: 25).

Early learning centres comprise of vibrant interaction of children, teachers, environment, family and curriculum (Sanders, 2002: 17). For Casey (2005: 57), the learning environment is not just a physical setting but is made up of everyone in it, their personalities, the weather, seasons and events in the lives of the children and the community. The learning environment does not just consist of physical features, but of the atmosphere as well, which can influence children's play significantly. Casey (2005: 38) further indicates that the physical environment can portray the message that this is a space for children, for instance by means of soft landscaping,

dimensions, appealing equipment and ample things with which to interact, which will be an implicit invitation to children to use it fully. The environment plays a vital role in children's learning because "the environment we are in affects our moods, ability to form relationships, effectiveness in work and play – even our health" (Bullard, 2010: 3). To summarise, an early learning centre should be exhilarating to children, inspirational in generating enthusiasm and creating an appetite for learning (Drake, 2009 [2010]: 1).

Before discussing learning environments or debating the choice of a curriculum, the uniqueness of young children as well as how they learn have to be investigated and considered.

2.5.2 Who are learning centres for?

One cannot discuss quality in early learning centres without considering our knowledge about children's development and the learning environment. As Goodfellow (2003: 1) emphasises:

> *Increasing knowledge about early development, gleaned through brain imaging techniques, has highlighted the extent of the brain's plasticity and the ways in which hard wiring of the brain occurs during the early years. In any discussion of quality there is, therefore, a need to address tension between observable, quantifiable and objectified measures and the processes associated with relationships that involve responsiveness, reciprocity and engagement.*

The hard wiring of the brain that occurs during the early years is affected by, amongst others, the learning environment. According to Strong-Wilson and Ellis (2007: 43), there are two important reasons why children's development and learning are seriously affected by the learning environment. Firstly, because young children are in the process of rapid brain development and the environments that they are in, can either help to build and form connections or to prune away synapses that are not used. Children's positive experiences will support them in this process. Insufficient

surroundings nevertheless can limit children's experiences and thus vitally influence the way the children's brains develops (Strong-Wilson & Ellis, 2007: 43).

Secondly, the amount of time which children spend in these environments plays a strong role in the children's development. Numerous children attend the same centre year in and year out and spend a large part of their wakeful hours in the same early childhood surroundings. As Bullard (2010: 3) explains:

> *In the past, many teachers believed that play was the only catalyst for learning. However, most teachers now realise that children's learning through play is profoundly affected by the social and physical environments they are in. If we want to prevent boredom and help children meet outcomes primarily through play, we need to intentionally design environments that provide children with the materials, tools, and challenges that allow development to flourish. For children to gain the most from play, we need to be available to scaffold children's learning ... Quality environments are the foundation upon which quality, play-based curriculum is built.*

Even though such learning environments are being planned and designed by adults, it is important to remember that children are not little adults. Children are not capable of, interested in, nor have the same needs as adults. Thus, the environment design should specifically keep children's needs in mind. Furthermore, differences between children themselves, for example the way they learn, need to be taken into consideration in this regard (Sanders, 2002: 8; Walsh, Sproule, McGuiness, Trew, Rafferty & Sheehy, 2006: 202).

2.5.3 How do young children learn and develop?

Wallace (2002: xii) proclaims that the best present parents and teachers can offer children is "the gift of learning how to learn". Learning enables children to use and make "symbolic systems, such as play, language and representation" (Pascal & Bertram, 2001: v). Rivera (2008: 15) additionally reminds parents and teachers that "every moment is an opportunity for children to learn".

Young children's thinking and learning are qualitatively different from that of adults. Children are playful and naturally curious and therefore they learn when they are physically active, involving their senses, exploring and playing, having real direct experiences, hands-on manipulating a broad range of real objects, and working with children as well as adults and also by means of a great deal of repetition (Redleaf, 2009: 1; Santrock, 2008: 301). They learn when they are making meaningful plans and decisions, seeing the result of their actions and building on what they already know. It may be surprising that these results can stem from a single daily programme, there are however overarching lessons that children can learn in an early learning centre that may tie together these seemingly unconnected outcomes (Casey, 2005: 1; Dombro, Colker & Trister Dodge, 2002; Gordon & Browne, 2005: 41; Jones, 1993: 308; Schulman, 2005: 1; Wikipedia, 2007).

The creation of interesting situations and exciting opportunities is needed for direct, hands-on manipulation of the environment, to facilitate experiences, to arouse the children's curiosity and in that way enable them to learn as much as they can. Early learning centres should promote sufficient preparation for learning through a variety of learning activities and explorations (Santrock, 2008: 301).

Wallace (2002: xii) reminds teachers, furthermore, to instil the necessary skills in children which they require for further learning. According to her, "the most important skills revolve around identifying the problem in the first place, solving them as well as possible, then reviewing the whole thinking procedure to refine and crystallise the procedures ready for the next time" (Wallace, 2002: xii).

In the quest for effective practice, various theories emerged that were fundamental to people's understanding of children's growth, development and learning. These theories all enrich our understanding of high-quality early childhood education in various ways. Table 2.3 provides a summary of eight of the most influential theories, their founders and years of origin, the main characteristics of the theories, as well as the key elements of the theories (Bredekamp, 2011; Darragh, 2010; Dolya, 2010; Feeney, Christensen & Moravcik, 2006; Gordon & Browne, 2004; Mayesky, 2009; Schirrmacher, 2006).

Table 2.3: A comparison of eight developmental and learning theories

Name of theory, founder, year	**Main description of the theory**	**Key elements of the theory**
Ecological systems theory Urie Bronfenbrenner 1979	Describes the interrelationship between children and the contexts of their development	*Microsystem*: immediate surroundings and relationships of a child's world *Mesosystem:* connections between different structures of the microsystem *Exosystem:* the larger social system that affects the child, but that the child does not directly participate in
Theory of cognitive development Jean Piaget 1972	Describes children's cognitive development in a series of four stages of which three are relevant to early childhood	*Sensorimotor stage* (0–2 years): rely on senses and reflexes to physically explore environment *Preoperational stage* (2–7 years): interaction with people and objects *Concrete operational stage* (7–11 years): experimenting and creating new meanings based on interaction with environment
Psychosocial theory Erik Erikson 1950	Development occurs based on internal psychological factors and external social factors	*Trust versus mistrust* (0–2 years): the quality of care is essential for forming basic trust *Autonomy versus shame and doubt* (2–3 years): learning to coordinate many new patterns of action and to assert themselves as human beings *Initiative versus guilt* (preschool age): period of interest, active exploration and readiness for learning, expressing creativity and curiosity; need to take risks and freely explore *Industry versus inferiority (primary grades)*: children need to develop a sense of competence and worth (I can do it)
Hierarchy of	Hierarchy of five	*Physiological needs*: food, shelter, water

Name of theory, founder, year	Main description of the theory	Key elements of the theory
needs theory Abraham Maslow 1998	levels of basic needs, culminating with attaining self-actualisation	*Safety and security* *Love and belonging* *Self-esteem and self-competence* *Self-actualisation*
Socio-cultural theory Lev Vygotsky (1920-1930) Not accessible to Westerners before 1962	Children learn from social interaction within a cultural context	*Zone of proximal development:* "the place where the child and the adult meet", the distance between the actual developmental level and potential development *Private (inner) speech:* self-directed language which children engage in to assist in problem solving; this is essential for a child's self-regulation *Collaborative/assisted learning/co-construction (social construction of knowledge):* children learn by solving problems collaboratively with the teacher's support or by working with peers
Attachment theory John Bowlby and Mary Ainsworth 1972	The quality of relationships between child and adult(s) (affectional bond) have lifelong impact on all future relationships	Patterns of attachment: *Secure* *Anxious/ambivalent (resistant)* *Anxious/avoidant*
Theory of multiple intelligences Howard Gardner	There are eight types of intelligence that influence how children choose	*Linguistic intelligence:* ability to use words to express ideas and learn new words or other languages *Logical mathematical intelligence:* ability to understand the basic properties of numbers

Name of theory, founder, year	Main description of the theory	Key elements of the theory
1983	to process information and interact with the environment	and principles of cause and effect *Visual spatial intelligence:* ability to visualise and form a mental image of spatial layouts *Bodily kinaesthetic intelligence:* ability to use body to solve problems *Musical intelligence:* ability to produce and respond to music *Naturalistic intelligence:* a passion for and knowledge of nature *Interpersonal intelligence:* ability to successfully interact with others; effective communicators and strong empathisers *Intrapersonal intelligence:* high levels of self awareness and know own emotions
Family systems theory Murray Bowen 1978	A tool for understanding how the family as an emotional unit influences individual development	Family systems: *Have interrelated elements* (individual family members and relationships) *and structure* *Act in patterns* which provide members with information about how they should function *Have boundaries* that range in a continuum from open to closed *Whole family is greater than the sum of its parts* *Families shape behaviour* through messages and rules

Each of the theories summarised in Table 2.3 made a significant contribution in the field of early childhood education. *Ecological systems theory* "supports understanding the complex, bidirectional interactions between a child and their environment, in turn impacting how educational services are designed to encompass and impact child, family and community" (Darragh, 2010: 107). The *theory of cognitive development* explains the development of thinking according to various stages that exist in all

human beings and which inform teachers on the way children view and process the world. The *psychosocial theory* has specific impact on teachers' understanding and support of young children regarding the process of "becoming a separate person" (Feeney *et al.,* 2006: 126). The *hierarchy of needs theory* alerts teachers to children's needs within a hierarchy that starts with fundamental needs and culminates with self-actualisation and which accentuates the significance of meeting the foundational needs first in order for higher needs to develop. The focus of the *socio-cultural theory* is the transmission of values, beliefs, skills and tradition. This theory puts emphasis on the family, social interaction and play as the main influences in children's lives. In the *attachment theory* the quality of relationships is prominent and the importance of quality, stable relationships in early childhood environments is stressed.

The *theory of multiple intelligences* informs teachers about eight types of intelligences which encourage educators to support each child's strengths by creating suitable environments and experiences. The *family systems theory* helps teachers to understand the families' individual components and their intricate interactions and to assist teachers in understanding and partnering with families in early learning centres (Bredekamp, 2011; Darragh, 2010; Dolya, 2010; Feeney, Christensen & Moravcik, 2006; Gordon & Browne, 2004; Mayesky, 2009; Schirrmacher, 2006).

Child development theories and educators' experiences advise us that the best way for children to learn is when they have direct, hands-on experiences. "Play is the ultimate realisation of the early childhood educator's maxim of learning by doing. Since the field began, early childhood educators have sought to understand and support the most natural of activities" – play (Feeney *et al.,* 2006: 167).

2.5.4 The role of play in early learning centres

It is evident from research that young children learn best by means of play (Casey, 2005; Dombro *et al*., 2002; Gordon & Browne, 2005; Jones, 1993; Trister Dodge *et al*., 2003; Wikipedia, 2007). Play is beneficial for all areas of development in children, to stimulate their senses, exercise their muscles, coordinate their sight with

movement, to gain mastery over their bodies, to make decisions, and to obtain new skills. “Indeed, play is so important to children’s development that the United Nations High Commissioner for Human Rights (1989) has recognised it (play) as a right of every child” (Papalia, Olds & Feldman, 2008: 308).

Engelbright Fox (2008: 85) emphasises that “although it is difficult to define the concept play, it is very easy to recognise it”. Children that are actively involved in play may be engaged in an assortment of activities. They can play alone, with someone, or in a group. Play is strongly tied to children’s intellectual, socio-emotional, and motor development; and hence is an important component of developmentally appropriate early childhood programmes (Connecticut State Board of Education, 2007, Dombro, Colker & Trister Dodge, 2002; Feeney, Christensen & Moravcik, 2006; Engelbright Fox, 2008; Mayesky, 2009; Schirrmacher, 2006).

The philosophy of early childhood education is largely child-centred education. The focus is therefore on the importance of play. Play can be seen as children’s work and is crucial for their sense of accomplishment and feeling competent (Rivera, 2008: 15).

Through play children get the opportunity to actively explore, manipulate and interact with their environment. In Santrock’s view (2008: 342), play also has the capacity to release tension, improve the development of cognitive abilities, expand exploration and enhance relationships with peers. Play also encourages children to investigate, create and make discoveries and motivates children to take risks that add to their understanding of the world. Through play and interaction with concrete material, children are challenged to achieve new levels of understanding of people, identities, concepts, elements, dreams, reality and unreality, events and the environment (Casey, 2005: 1; Connecticut State Board of Education, 2007: 10; Stegelin, 2008: 113; Wikipedia, 2007).

For young children play is the vehicle for learning when they actively investigate the world around – for instance by operating objects, performing roles, and experimenting with an assortment of materials and resources. Play provides learning opportunities in circumstances wherein children are generally approachable. For

children play and work are not separate categories; they experience learning and doing as inextricably connected especially in terms of problem solving, language acquisition, literacy and numeracy and obtaining social skills. Play has thus a valid and significant position in early childhood education and can be utilised to advance children's learning in all developmental areas (Ontario, Ministry of Education, 2006: 14).

Early learning environments can contribute through play, but cannot assure that children will be ready for the labour force in the end. However, they will inspire and equip children through learning styles that support lifelong learning and provide them "with strategies that can serve them throughout their school careers and beyond" (Hirsh-Pasek *et al.,* 2009: 64).

Trawick-Smith (2003: 253) argues that a correlation exists "between play and each of the three fundamental areas of development: intelligence, creativity and language". She explains that intelligence, creativity and language facilitate play, "and play, in turn, contributes to development in these areas". There is a strong correlation between the distinctive kinds of free play found in early childhood, and *'high creativity'*. Bronson and Merryman (2010: 2) remark that children spending more time acting out characters during role-play, are more creative: "voicing someone else's point of view helps develop their ability to analyze situations from different perspectives". They note that highly creative children who are playing alone may act out anger, hostility, anguish and other negative emotions. "The hypothesis is that play is a safe harbour to work through forbidden thoughts and emotions" (Bronson & Merryman, 2010: 2).

Drake (2009 [2010]: 5) emphasises that adults play a crucial part in "identifying children's needs, assessing their stage of development and intervening in play to support individuals in moving forward". In Redleaf's (2009: 1) opinion, the most effective way for children to learn is when they are playing and the learning appears as a spin-off of that play.

2.5.5 What should the curriculum offer? The debate between play-based approach versus academic direct instruction

The term curriculum has a rather different connotation in early childhood than in primary, secondary or higher education. In those settings curriculum usually refers to a course of study or a specific topic. In early childhood education, however, the term curriculum has a different meaning. Essa (2011: 237) explains:

> *In early childhood, the curriculum tends to be viewed more holistically, and all aspects of the program are integrated and related. Most early childhood professionals today view the curriculum as integrally tied to a concern for dealing comprehensively with the "whole child," the child's physical, social, cognitive, and emotional development. The foundation for sound program development is based on research and theoretical knowledge that helps us understand how children learn, what makes for a good learning environment, and what curriculum material is suitable for young children.*

Supporters of a constructivist, child-centred, approach, where children are constructing their own knowledge, concur with the above view. They advocate against an academic, direct, teacher-centred instruction approach (Vonta, 2000: 177). Not all scholars and educators share this view. Controversy still characterises global debates on the curriculum used in early childhood centres.

In recent years, there have been many publications on the significance of learning in the early years (Redleaf, 2009: 1). This attention resulted in a tendency towards demands for academic learning that starts sooner and sooner in young children's lives. Redleaf (2009: 1) reports that in response to this trend, the National Association for the Education of Young Children (NAEYC) "has altered its position statement for developmentally appropriate practice in working with young children. This position emphasises the importance of planning opportunities for fostering learning".

Some countries, for example China, expect early learning centres to offer academic programmes in order to prepare young children for formal schooling. Most early learning centres in Western countries however, have a philosophy with a child-

centred focus that accentuates social and emotional growth which corresponds to the developmental needs of young children. Conversely some programmes, for instance those rooted in Piaget's and Montessori's theories, are prominently promoting cognitive aspects (Papalia, Olds & Feldman, 2008: 288).

A way of combining play with more planned and individualised outcomes for specific children, also known as "intentional interactions/curriculum/teaching practices" have been supported by several early childhood educators in Australia and the United States of America (Klein & Knitzer, 2006; Queensland Studies Authority, 2010). The emphasis of this research based curriculum, which is sensitive to cultural diversity, is on the teacher's active engagement with children and specifically focuses on paying attention to social and regulatory skills. Because teachers recognise that children's learning occurs in social contexts, they therefore deliberately make well-planned decisions to support learning through children's social interactions with a variety of partners.

To achieve success with this approach, the importance of putting strategies in place, supporting teachers to implement the curriculum effectively are equally important (Klein & Knitzer, 2006: 15, 32). Intentional teaching practices are implied in the teachers' decisions on planning and organisation of the physical environment and to engage with children through the context of play and real-life engagements. This pedagogical approach entails far more than merely transmitting facts to the children and put emphasis on opportunities that foster higher-order skills. Teachers use a wide range of interactional strategies as they co-construct learning with children and support them to investigate and explore ideas in order to extend children's thinking, challenge their ideas and expand their interests. Teachers introduce ideas and make links to children's' ideas in order to support children to discover new possibilities and to develop and these hypotheses (Queensland Studies Authority, 2010)

Supporters of the traditional developmental play-based approach insist that young children's strong need for exploration and free play are overlooked by programmes which are academically orientated. They furthermore warn that too much teacher-centred instruction may suppress young children's interest and obstruct self-initiated learning (Papalia *et al*., 2008: 288). Santrock (2008: 308) suggests that in order to

encourage exploration opportunities, children ought to choose many of the activities that they want to explore themselves. He warns against rigid paper-and-pencil exercises that entail rote learning. Because of their active nature and way of learning, young children "should not be spending lots of time passively sitting, watching and listening". Dolya (2010: 10) proclaims that when children are playing, they engage in a make-believe situation, with "explicit roles and implicit rules". She also notes that when children are absorbed in play, their concentration and task dedication are much better than in academically directed activities arranged by the teacher.

According to Hirsh-Pasek *et al*. (2009: 67), play and playful learning encourage the development of all aspects of early childhood, and thus supply the launch pad for children to thrive academically and socially in their transition to school. They also warn that "early childhood programmes that squeeze out spontaneous and guided play in favour of formalised academic training dampen children's enthusiasm and motivation to learn and fail to equip children with the full range of capacities they need to thrive at school". In addition, curricula that are excessively instructive and where young children are mostly passive beneficiaries do not result in establishing lifelong learners. "Returning play to its evidence-based, rightful place in early education – centre-stage of the curriculum – is a first step towards restoring developmentally appropriate play experiences to children's home lives, as parents look to educators for advice and models of development-enhancing learning activities" (Hirsh-Pasek *et al*., 2009: 67).

The act of playing improves cognitive development. Those who play mostly become intellectually advanced. Strong correlations linking socio-dramatic play and language associated abilities such as reading and problem solving have also been noticed. Socio-dramatic play is an essential step "between the concrete thought processes of early childhood and the more abstract thinking in adulthood" (Trawick-Smith, 2003: 253–254).

Santrock (2008: 301) explains that both direct instruction as well as constructivist approaches are included in many high-quality early learning centres. He notes that numerous early childhood education experts are concerned about "an exclusive direct instruction approach, that places too much pressure on young children to

achieve and do not provide any opportunities to actively construct knowledge". In his view the emphasis of proficient, quality early childhood programmes should not be focused on the cognitive development of children exclusively, but they should also acknowledge the importance of the socio-emotional development (Santrock, 2008: 301). In the same vein, Rivera (2008: 15) proclaims that "children need to know certain phonemes, shapes, colours, counting and some basic facts, but equally important, they need to get along with others, maintain emotional control, form friendships and follow directions. Without these skills upon entering school, the academic part of learning can be significantly delayed", in other words, school readiness requires intellectual, social and emotional preparation.

Hirsh-Pasek *et al.* (2009: 51) argue that "the programmes that offer the best traction for children's achievement and socio-emotional growth take a hybrid approach. That is, within developmentally appropriate education, "there is room for real instruction that is playful." They further state that play and learning are compatible. Mathematical and language content can and should be learned, however, not in unappealing and non-receptive environments in formal academic ways, but in socially rich and meaningful contexts.

One approach to encourage the *whole child* to learn is by means of free play and playful learning which underpin strong academic and social skills, but furthermore "prepare children for the future workplace in which lifelong learning will be rewarded" (Hirsh-Pasek *et al*., 2009: 65).
In order to decide on an appropriate curriculum, Essa (2011: 238) reminds us to keep in mind that "young children are eager, absorbent learners, curious and interested in learning as much about their world as possible". Children are keen to explore and discover, and they crave stimulating, new, physical, social experiences. Essa further urges us not to force-feed children with what we think they should learn, but alternatively to "plan a curriculum based on the faith that children's innate interest in the world will lead them to appropriate learning, given a suitable learning environment and knowledgeable adult guidance" (Essa, 2011: 238–239).

2.5.6 The learning environment

Early childhood experts agree that children need developmentally appropriate experiences which allow all children to have healthy bodies, capable minds and appropriate social skills (Gordon & Browne, 2005; Jones, 1993; Mayesky, 2009; Trister Dodge *et al.,* 2003. Although every child is unique with an individual temperament, learning style, family background, and pattern and timing of growth, there are predictable sequences of growth and change during childhood. For each learning environment it is very challenging to provide children with conditions and experiences that are in line with all these sequences of development (Myers, 1997: 6).

Berry (2001: 91) states that many playground designs in the past have catered mainly for the physical development of children and says that the importance of children's social, emotional and cognitive developmental needs have often been ignored. Trister Dodge *et al.* (2003: 173) remind us that learning in an early learning centre is full of contradictions. "It is calm, yet dynamic; predictable, but full of surprises; active and hands-on, but sometimes quiet and reflective." Berry (2001: 107) supports this statement by saying that children need the opportunity to be quiet or active, to socialise or to be alone and to be involved in activities appropriate for the age and current interests of both genders. Berry further notes that it is therefore very important that decision-makers are made aware of *all* the developmental needs of children and to ensure that a valuable, quality learning environment is provided indoors, as well as outdoors.

The Connecticut State Board of Education (2007: 34) emphasises that early childhood environments must invite children into learning experiences and must therefore be carefully planned, prepared and maintained. Two important messages must be portrayed through the environment, namely: that the space is for children and that it was purposefully created, based on how young children learn. This statement implies that a learning environment is not just a physical setting with a building and outdoor play area.

When planning an early childhood playground it is important to remember that the play area is an essential part of the educational programme. Berry (2001) and the Connecticut State Board of Education (2007) emphasise that children's developmental needs must be catered for with play features and experiences that suit their wide range of needs, skills and interests. Children need opportunities for discovery, exploration, creation, experimentation, observation and sustained engagement that take place in well-planned early childhood learning areas. Materials must be well chosen with intention and purpose. They also advise that the areas must be arranged to accommodate and support the work of children and adults, and that time must be scheduled to allow children full access (Berry, 2001: vii; Connecticut State Board of Education, 2007: 34).

In their programme planning, teachers should ensure that the learning environment is inclusive, safe and comfortable and that it is one in which learners feel stimulated to learn and explore (Ontario, Ministry of Education, 2006: 22) The learning environment can be enhanced by posing questions, making links between the familiar and unfamiliar, and arousing an awareness and interest through the choice of resources and the activities presented (Redleaf, 2009: 1). Drake (2009 [2010]: 5) notes that planning the physical environment and setting up good-quality areas of provision is simply not enough – the teacher must actually "value these areas as effective learning environments and spend time supporting children's learning in them".

According to Ontario, Ministry of Education (2006: 22), the use of space in the playroom and outdoor area, the use of time during the day, and the appropriateness and variety of the resources that are available including people and materials, are the key components of the learning environment. Redleaf (2009: 1), however notes that a constant stream of new apparatus is not needed, but rather frequent reorganisation of, or additions to, well-known toys and activities to spark renewed interest in them.

Equally important to the structural aspects concerning a learning environment is the atmosphere that the teacher creates that will be crucial for the children's emotional development. Therefore, the environment should encourage empathy, interest in trying new things, and the development of self-confidence (Dombro *et. al.,* 2002;

Mayesky, 2009; Sciara & Dorsey, 2003, Stegelin, 2008: 109). Children also need caring people who love them in order to learn sufficiently. In this regard, relationships of trust between adults and children, and increased parental involvement, are pivotal (Santrock, 2008: 301).

Furthermore, the creators of child care environments need to consider the contexts and what children experience in those contexts (Goodfellow, 2003: 1). Drake (2009 [2010]: 7) suggests that in their planning of the learning environment, teachers should strive for a balance between providing structure to scaffold children's learning, and offering them freedom and opportunities to engage in experimentation, investigation and pursuing of their own personal interests. She further points out that the learning environment should provide opportunities for children to engage in playful activities either as individuals, in pairs or in groups, promoting active and independent learning where children make choices "feeling confident to 'try out' ideas in a supportive and 'safe' setting". Every day should provide opportunities for becoming deeply engaged in learning, frequently by means of self-initiated activities beyond any planned adult focus (Drake, 2009 [2010]: 2, 7).

Sandall and Schwartz (2002: 11) summarise the key requirements of a quality learning environment when they say:

> *Research and experience have uncovered some necessary components of a developmentally appropriate environment, namely, engaging interactions, a responsive and predictable environment, many opportunities for learning, teaching that is matched to the child and the activity, developmentally appropriate materials, activities and interactions, safe and hygienic practices and appropriate levels of child guidance.*

2.6 REGULATING SERVICE PROVISION

Ebbeck and Waniganayake (2003) emphasise that children's service regulations are issued as a licence to operate a business or service, not as an individual's licence to practice as a professional. The levels of professional training and education are usually the responsibility of authorities who are not responsible for issuing the

licenses to operate early learning centres. In order to reach minimum standards for buildings and equipment, it should be kept in mind that the licensing of early learning centres must reflect related policy areas, such as building standards, health policies and fire safety requirements that are generated by various other local authorities (Ebbeck & Waniganayake, 2003: 118).

A community's perceptions of quality matters reveal disparities across class, gender, cultural and age calibrations (Ebbeck & Waniganayake, 2003: 113). These differences are not unanticipated, taking into consideration that our perceptions are influenced by aspects like background, experiences and proficiency. They indicate that in countries where governments play a fundamental role in funding systems of quality assurance, they situate themselves as arbitrators that are independent and objective on the one hand and protectors or guardians of children's welfare on the other.

The Organization for Economic Cooperation and Development (OECD) (2001: 9), stated in their findings, based on a study with 12 countries, that:

> *Governments promote quality improvement through: framework documents and goals-led steering, voluntary standards and accreditation* [not in the case of South Africa]*; dissemination of research and information; judicious use of special funding; technical support to local management; raising the training and status of staff; encouraging self-evaluation and action-practitioner research; and establishing a system of democratic checks and balances which includes parents.*

Research is increasingly demonstrating that such investment in early childhood development, particularly high-quality early childhood education, provides a wide range of significant benefits to develop children, families and societies as a whole. According to Decker and Decker (2005: 23) the positive effect of high quality programmes for children is substantial in terms of learning, language acquisition, intellectual development and succeeding in school.

Studies show that all children, regardless of whether they are from poor, middle-income or upper-income families, benefit from early childhood education programmes. Decker and Decker (2005: 23) point out that high-quality centres,

offering cognitive stimulation and emotional support, are particularly beneficial for children from stressful homes or where the family's income is low. However, the quality of education and care that children receive, differs considerably. Children, as well as their families, are benefiting from high-quality programmes, but poor quality programmes are harmful to them (Kostelnik *et al.,* 2004: 8). In addition, Papalia, Olds and Feldman (2008: 243) argue that regrettably children from low-income families are likely "to be placed in lower-cost and lower-quality care than children from more affluent families". Bredekamp (2011: 11), who is primarily referring to poverty, states that "the children who are most likely to benefit from high quality programs are the least likely to participate in them".

In their research, Rao, Sun, Zhou and Zhang (2011) found that in developing countries only a few systematic studies were conducted on the effect of the type of early learning experience on child development. However, large-scale studies conducted in Europe and the USA have verified that attending early childhood centres positively impacts on the cognitive outcomes of children from disadvantaged groups, especially in terms of their mathematics and reading achievement. The outcome of these extensive studies resulted in a general acceptance that preschool participation is beneficial for the development of children from families who experience socio-economical hardship. However, the research explicitly clarifies that there is a caveat – the quality of this experience matters.

Service providers have ethical responsibilities towards children. Childhood is an exceptional and precious phase in the life cycle. According to Morrison (2006), the main task is to offer centres for children that are healthy, safe, nurturing and approachable. "We are dedicated in supporting their development, respecting individual differences, helping children learning to live and work together, and to encourage health, self-awareness, proficiency, and resiliency" (Morrison, 2006: 382).

2.6.1 Measuring quality in early childhood education (ECE)

Ishimine *et al.* (2010: 69-70) argue that there are several noteworthy justifications for the measurement of quality in early learning centres. Measuring quality can, in the

first place, ensure that the national standards for children are met and secondly, can assist parents in their choice of an early learning centre. Thirdly, quality measurement can contribute towards consistent quality improvement of early learning centres especially in terms of the ongoing professional development of staff. In the fourth place, quality measurement can contribute towards recognition and acknowledgement of centres, especially in terms of financial or motivational incentives. The last reason offered by Ishimine *et al.* (2010: 70) concerns the children. They conclude from the research evidence that "it is clear that quality is significant in ensuring improvement of children's overall development. Therefore measuring quality is necessary to ensure all children have a good start in life and to maximise their potential".

It is evident from a previous section (2.3.1) that capturing a pure definition of quality is a complex task, however trying to measure quality is even more challenging. There are different perspectives on the measuring of quality which are reflected in different approaches to regulation and quality assurance. For Mooney, Cameron, Candappa, Mcquail, Moss and Petrie (2003), both evaluations and accreditation are important aspects of quality assurance. In his review of quality for early childhood services, Williams (1995) includes a useful diagram (Table 2.4) describing the characteristics of the three most common approaches to the measurement of quality. He suggests that the total quality management approach is the most appropriate one for childhood services. When I compare the total quality management approach with the quality assurance and quality control approaches, I agree with Williams that it is the most appropriate one, because it works through people and the view of quality lies in the opportunities. I associate myself strongly with the purpose that is to improve the outcomes for the users. However, it seems to me that there are also aspects in the other two approaches that have relevance in early childhood education and particularly in my study. One needs to consider the role, place and efficiency of existing quality assurance systems, which is a main feature in the quality assurance approach. The quality control approach views problems and the primary concern is the detection of errors, an area which should also be addressed in some way or another. In Table 2.4, I compare the main characteristics of the three approaches namely, total quality management, quality assurance and quality control.

Table 2.4: A comparison of the characteristics of the three most common approaches to the measurement of quality according to Williams (1995)

Characteristics	Total Quality Management	Quality Assurance	Quality Control
Purpose	Improves outcomes for users	Efficiency of system	Uniformity of standard
Works through	People	Systems	Standards
Responsibility	Improves outcomes for users	Efficiency of system	Uniformity of standard
View of quality	Opportunities	Preventive	Problems
Primary concern	Impact	Coordination	Detection of error
Popular forms of expression	Total quality management, continuous improvement	Quality assurance systems	Inspection, research, assessment

Golberg (1999: 21) argues that measuring quality in terms of the different components of a programme is inappropriate. She nevertheless remarks that children's daily experiences in early learning centres impact on their care and development and therefore the complex combination of all the components can offer enriching experiences to children and their families (Golberg, 1999: 21).

In terms of the measurement of quality in early childhood centres, research literature (CECDE 2004: 32) mainly distinguishes between two approaches. The first, a quantitative approach, comprises "standardised observation scales and external research assessments of effectiveness". In the second, more qualitative, approach to measuring quality, all stakeholders participate in identifying the components that constitute a high quality provision for a particular service. The latter way of measuring quality is used in Scandinavia and in parts of Northern Italy. Mooney *et al*. (2003: 9) indicate that this quality measuring approach is found where "… the structural conditions of quality are already in place …".

Structural criteria/qualities (sometimes referred to as 'input' criteria) refer to resources and organisational measurements of centres incorporating features such as

maximum group sizes, teacher/child ratios, teacher qualifications, and the presence and content of a curriculum. These qualities are relatively straightforward to quantify and measure (Bredekamp, 2011: 14; Dahlberg *et al.,* 2002: 98).

Process criteria/qualities refer to what takes place in the early learning centre, predominantly in terms of sensitive responsive care-giving, staff behaviour and the quality of relationships and interactions among children and adults, the curriculum (children's activities, learning experiences, and teaching strategies) and suitability of materials (Goodfellow, 2003: 1). Process criteria can also be expanded to take account of relationships between the centres and the parents as well as the nature of the parent/staff cooperation. Process criteria describe what life should be like for children in an early learning centre, how they should be treated, and how their learning and development should be supported. Evaluating these process quality features is more complicated, and yet, they are the fundamental elements of children's experiences. (Bredekamp, 2011: 14; Dahlberg *et al.,* 2002: 98; Goodfellow, 2003: 1). Essa (2011: 156) emphasises that "the calibre of child-adult interactions" (indicated by process criteria) is an essential indicator of quality in early learning centres. There is presently a significant interest in the development of quality measurements, and mostly in instruments that can accurately measure process quality (CECDE 2004: 31-32).

Dahlberg *et al.* (2002: 98) define a third grouping/approach, *outcome* criteria, mainly in terms of "certain aspects of child development, assumed to be desirable, but also to young children's later school, social and economic performance sometimes stretching as far as adulthood".

Goodfellow (2003: 1) notes that "the common thread that runs through quality measures is that quality is related to both structural and process variables". Structural quality and process quality are interconnected. Bredekamp (2011: 14) explains with an example:

> *Well-qualified teachers are needed to plan and implement an engaging curriculum and teach effectively. Similarly, positive relationships between teachers and children are more likely to be established when the size of the group and the ratio of adults to children is relatively small. An age-*

appropriate, well-equipped, and organised physical environment is needed to protect children's health and safety to promote active learning.

2.7 QUALITY ASSURANCE FRAMEWORKS

The essence of the quality debate is captured by Gormley (1997:32) who states that:

Child care is a labour problem, an administrative problem, a regulatory problem and of course a familial problem.

Ebbeck and Waniganayake (2003) argue that one needs to be clear about who is going to do the assessment and for what purpose, before selecting the type of measuring instrument(s) that best meet one's objectives for quality assessment. Is the purpose for regulation, research or for programme improvement? The purpose of my study indicates elements of each. Programme improvement is of interest to all role players, the consumers (children and their families) and the service providers (including staff and sponsors). Managing programme quality may therefore be perceived as a joint responsibility concerning parents and staff (Ebbeck & Waniganayake, 2003: 121).

According to CECDE (2004: 36-37) there are a variety of different approaches to support quality. Amongst these are state regulations, which are usually based on the minimum standards for ensuring the health and safety of those involved in the service. They indicate that evaluation and accreditation schemes usually involve standards, which tend to be more rigid and wide-ranging than those included in government regulations. In Golberg's opinion (1999: 41–42), accreditation is a worthy strategy identified by child care providers in the quest to provide services of high quality.

Ebbeck and Waniganayake (2003: 116) explain that there are benefits and limitations concerning government regulations in early childhood. According to them, licensing standards tend to focus on structural aspects, such as group size, staff/child ratios and floor space. These prescriptive measures are usually set at minimum compliance standards, visible and easy to measure. Ebbeck and Waniganayake (2003) experience the emphasis on structural input as a weakness, because it does not get

to the heart of the service being provided, namely the education and care programme. They also say that in the long term, the net impact of this type of government regulatory system is the legitimisation and reinforcement of dominant cultural beliefs and behaviours appropriate for children during early childhood.

Research literature (CECDE, 2004) suggests that the adoption of an evaluation or accreditation approach to support quality can positively affect the standard of care and education provided. Some say that in countries where the provision of early childhood education is dependent on the free market, evaluation and accreditation mechanisms are more likely to be adopted in an effort to improve the quality of the service provision (CECDE, 2004: 36-37).

2.7.1 The implementation of quality assurance frameworks

The debate on quality early childhood provision has taken place in many parts of the world, for example the United Kingdom, Europe, New Zealand, Australia and in North America. For Douglas (2004: 9) there are four key factors to be considered in any discussion of quality:

- *First and foremost, any attempt at defining 'quality' is inherently a values-based exercise;*
- *Secondly, any definition of 'quality' is to an extent transitory and arriving at what may be called 'quality indicators' is a dynamic and continual process;*
- *Thirdly, a range of perspectives can be identified when looking at quality namely the views of the children, parents, ECE staff and of the funding agency.*
- *Fourthly, equal opportunities, policies and practices (covering access to services, their content and management and employment practices and procedures within them) are central features of quality in child care services and this means looking at 'quality' at two levels: individual services and service systems* (Douglas, 2004: 191).

In my study, I am keeping these four factors in mind when I try to explain the concept of quality. Firstly, the fact that quality is based on and influenced by values should be considered at all times. Secondly, developing and revising quality indicators will always be an ongoing process because circumstances and conditions in early childhood education keep changing. The third factor is of specific importance to this study because there are many different role-players and all of their perspectives should be viewed and considered. The last factor indicates that one must look at quality on the different levels. In my study, I adhere to that aspect as well.

Perlman, Zellman and Le (2004: 399) point out that there is consensus that quality matters, which implies that there is a need for quality assurance, since it sets quality standards. However, less consensus exists about what quality is or how it can be measured. There are two different approaches to measuring quality that can be distinguished. The first approach attempts to assess overall or global quality by including measures of a range of attributes associated with quality care. These include the Infant/Toddler Environmental Rating Scale (ITERS); Early Childhood Environmental Rating Scale (ECERS) and an assessment profile for early childhood programmes. These observational instruments measure quality of 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.

The second approach to measuring quality is about assessing quality that focuses on specific process indicators. These measures identify one indicator that is associated with quality care and assess that single indicator in some depth. Table 2.5 shows three different rating scales and the indicators on which they focus.

Table 2.5: Three specific rating scales and the indicators on which they focus

The caregiver interaction scale (Halle *et al*., 2010: 99–101)	A 26-item observational measure of caregiver sensitivity contains subscales of positive interaction, punitiveness, permissiveness, and detachment.
The adult involvement scale (Howes & Stewart, 1987)	Measures caregiver responsiveness through observations of two children per classroom.
The observational record of the care giving environment (ORCE) (Halle *et al*., 2010: 226–239)	The ORCE targets the caregiver's behaviour with a specific child and consists of four 44–minute observation cycles.

Other specific process quality indicators include: child-caregiver attachment, teacher styles and beliefs and staff competence and parent-teacher interactions (Perlman *et al.,* 2004: 399-400).

A study that was conducted on early childhood development in countries such as Canada, USA, Italy, the Netherlands and Sweden indicated that their municipal early childhood development programmes were of a high quality. In South Africa, however, "early childhood development delivery faces disparate and unequal provision that is exacerbated by a lack of funding from the government" (DBSA, 2007: 20).

Ample ways potentially exist according to which quality of early learning centres can be determined. One specific method that has been implemented in a number of countries is to implement quality assurance frameworks. A number of quality assurance frameworks have been used in different countries for more than two decades (Bredekamp, 2011; Mashburn, Pianta, Hamre, Downer, Barbarin, Bryant, Burchinal, Early & Howes, 2008). Different terminology is used to describe the systems that educational organisations put in place in order to classify and determine the quality of early learning centres. Terms that are being utilised are quality assurance frameworks, accreditation frameworks, accreditation systems, rating scales, observation measures, accreditation schemes and child care accreditation.

South Africa currently does not have an accreditation framework or quality assurance mechanism in place for early childhood education. In countries where it has been implemented, many advantages have been reported. Golberg (1999: 39-40), who conducted an extensive study, said:

> *Accreditation provides parents/consumers with a basis of comparison and choice. It sets quality standards and a means for measuring services to children, providing a mechanism through which funders can verify that money invested is being used to deliver quality care. For child care services it provides a means of reflecting on and improving program practice.*

Because a framework is valued-laden, certain criteria for identifying quality must be identified and selected. "… accreditation occurs in and is influenced by social, political and cultural contexts" (Bredenkamp, 1999:61). Golberg (1999:5) argues that when a quality assurance or accreditation framework is developed, it would be ideal to consider the quality criteria established by early childhood researchers, professional bodies, as well as a wide range of stakeholders such as children, parents and the community. In my study, the opinions of the different stakeholders are voiced.

Child care accreditation is defined by Doherty-Derkowski as "a process by which a representative body, recognised by both the community and the service community in general, establishes standards for services. The standards are above the minimum regulatory requirements of the government. Programmes can apply on a voluntary basis for evaluation against the standards and if found to meet or surpass them, are granted a certificate which recognizes this fact" (Doherty-Derkowski, 1994: 113).

I think Wangmann (1992) is realistic in saying that accreditation builds on the base set by regulations, but that it must however be emphasised that while regulations are necessary they are not sufficient to ensure quality. Quality assurance is necessary to bridge the gap between the minimal level of quality set by the regulations and the level of quality that should be right for all children (Wangmann, 1992: 27).

According to Ogston (2003:1), accreditation recognises professional programmes for a level of performance, integrity and quality that entitle them to the confidence of the profession, educational community and the public they serve. Accreditation status signifies that the programme meets established and nationally acceptable standards of scope, quality and relevance.

Although quality is experienced differently, it seems that there is a need in many countries to try to determine the quality of early learning centres (Ginsberg, 2003; Golberg, 1999; Myers, 2007; Ogston, 2003; Ontario, Ministry of Education. 2006). For more than twenty five years different quality assurance frameworks have been introduced and implemented in developed countries (Golberg, 1999:1; Ogston, 2003:1).

Accreditation or quality assurance frameworks have never been implemented in the South African early childhood development sector. These accreditation frameworks have primarily been designed, used and adapted by first world countries. To get a clearer understanding of the different frameworks, I provide the background to how the quality assurance frameworks started, have developed, have been adapted internationally and what their main characteristics are.

2.7.2 The ECE accreditation and quality assurance situation in the USA

In order to make “consistent ways of measuring quality” available, researchers have developed quality assessment (observation) tools (Bredekamp, 2011: 14). The first rating system was established by the largest early childhood development organisation in the USA, the National Association for the Education of Young Children (NAEYC), “a powerful voice for children, families and teachers” (Essa, 2011: 104). As far back as 1984, NAEYC published the first edition of the “Accreditation Criteria and Procedures”. The following year, the *Guide to Accreditation* was published. Both volumes were revised in 1992 and again in 1998 (Dickinson, 2002: 28). Since *NAEYC’s Accreditation System* was introduced, efforts to support quality early childhood programmes have expanded, and NAEYC’s accreditation has been recognised nationally. By 2008 more than 8 000 programmes had been accredited.

After more than 20 years in operation, in 2008, this voluntary accreditation process, sponsored by NAEYC, has been reinvented, strengthened, and made more consistent. The system "is now a more rigorous process that involves intensive self-study and culminates in a site visit and assessment" (Bauer, 2005: 1, 3; Essa, 2011: 101). Although many of the original system details have changed, the intent is still the same namely, "ensuring the quality of children's daily experiences in early childhood programs". To promote positive child outcomes, is the heart of the new framework, its standards, criteria and procedures" (Bauer, 2005: 1, 3).

The NAEYC early childhood programmes standards and accreditation criteria comprise ten standards that early learning centres must achieve to obtain accreditation. Bredekamp (2011: 13) notes that the intention of these standards is to answer the question "What is high quality?" and that, in order to understand what is meant by quality, "it is important to see the relationships among the standards rather than to see them as a discrete list". She further explains:

> *In the accreditation system the primary focus is on the children as described in the first five standards: relationships, curriculum, teaching, assessment of children's progress, and health. In the other five standards teachers, partnerships with families and communities, administration, including the physical environment, leadership and management are addressed. Meeting these standards establishes a supportive context that makes it possible to achieve and maintain quality of life for children described in the first five standards (Bredekamp, 2011: 13–14).*

Although the NAEYC accreditation system initially "was practically the only show in town" (Neugebauer, 2009: 14), another accreditation framework, namely the *Early Childhood Environment Rating Scale (ECERS)* gradually gained popularity. The ECERS, which was first presented in 1983 by Harms and Clifford, has become "a tried and tested means of assessing quality" (Dahlberg *et al*., 2002: 98) for many researchers. The ECERS scale included 37 items grouped into seven subscales on the basis of face validity. These items were drawn from research, from performance indicators of quality child care and early childhood programmes, and from nominations by child-care practitioners. An expert panel was used to determine validity. They rated the importance of the selected items as indicators of the quality of

childhood programmes. In addition, expert and non-expert raters assessed classrooms (Podmore & Meade, 2000: 400).

The ECERS became the best known and most commonly used rating system and has been described by its authors as “a relatively short and efficient means of looking seriously at the quality of the [early years] environment... [covering] the basic aspects of all early childhood facilities” (Harms and Clifford, 1980: iv in Dahlberg *et al*., 2002: 98).

According to Sheridan and Pramling-Samuelsson (2001:174), the ECERS has the ability, as a tool, to account for a child’s perspective and the rating scale identifies different levels of quality concerning children’s opportunities to take initiative, to participate and to communicate. In my view, this is an important fact, because I feel that as children are the main characters in the story, their voices must definitely be heard and their views need to be considered.

After the original ECERS was published, other related *specialised rating scales* were also introduced in the USA, namely:

- 1989 the Family Day Care Rating Scale (FDCRS)
- 1990 the Infant/Toddler Environmental Rating Scale (ITERS)
- 1996 the School-Age Care Environment Rating Scale (SACERS)
- 2004 the Program Administration Scale (Long, 2008:1)

In 1998 the original ECERS was revised, updated and expanded. The *Early Childhood Environment Rating Scale Revised* (ECERS-R) now had 43 items, to reflect changes in the early childhood field, including items that address issues surrounding children with disabilities and increased cultural sensitivity. “The ECERS-R also incorporated feedback from researchers concerning difficulties with particular items, and added indicator items to help scorers more reliably assign numerical values to items. It replaced the seven original subscales with seven revised ones” (Podmore & Meade, 2000: 400). In the South African context where there is a lot of diversity in terms of cultures and learners with different abilities, this revised scale should be helpful to consult.

The ECERS-R is a widely used instrument for measuring *process* characteristics of the environment. This measure describes the characteristics of the physical environment but, more importantly, it also rates the quality of the social and pedagogical environment which children experience. The word *environment* is taken in its broadest sense to include the quality of social interactions, strategies to promote learning, and relationships between adults and children. For Pugh and Duffy (2006: 168-169) the emphasis in the ECERS-R is very much on a balanced and 'whole child' programme. Despite its title of 'Environment Rating Scale' the ECERS-R describes the process of the educational and care environment even more than the physical space and materials.

In 2008, another observational measure of quality, the Classroom Assessment Scoring System (CLASS) for preschool (and primary grades) was established. The focus of CLASS is on several dimensions regarding teacher-child instructional strategies and their relationships (Bredekamp, 2011: 14). This instrument assesses different dimensions of social features of interactions namely "positive climate, negative climate, teacher sensitivity, regard for student (learner) perspectives, behaviour management, productivity, instructional learning formats, concept development, quality of feedback and language modelling" (Pianta, La Paro & Hamre, 2008; Mashburn *et al.,* 2008).

2.7.3 The ECE quality assurance and accreditation situation in Europe

The ECERS, originally designed in the United States and used in a variety of early childhood settings, was modified and implemented in Europe as well. The Effective Provision of Preschool Education Project (EPPE) is a major European longitudinal study which investigated the effectiveness of preschool education and care in terms of children's development. It is an 'educational effectiveness' study of a national sample of randomly selected children aged 3 to 7 years old throughout England. In the EPPE research the ECERS-R rating scale was supplemented by a new scale called the *ECERS-Extension* (ECERS-E). This new supplementary scale was designed because ECERS-R was thought to be insufficiently 'emergent' in its assessment of curricular provision for literacy and numeracy and thus insensitive to

important curricular activities conducive to children's intellectual and linguistic progress in the run-up to school. The ECERS-E was developed to extend the ECERS-R, especially in emergent literacy and numeracy, and also in science/environment and in 'diversity'. Thus, the ECERS-E is specifically designed to "tap the dimensions of quality" which should lead to more 'academic' learning goals (Pugh & Duffy, 2006: 169-170; Stipek & Byler, 2004: 377-378).

Both of the revised rating scales have advantages. According to the authors of the ECERS-E, Sylva, Siraj-Blatchford and Taggart (2003: 46), quality is not a universal concept but it depends on national curricula and cultural priorities. The outcomes deemed important in children's development will relate in different ways to the many measures of quality. They say "if academic achievement is valued at the start of school, then the ECERS-E is a good predictor of children's readiness for school". This readiness includes language, numeracy skills and the component skills of early literacy. On the other hand, if social outcomes are valued, then the social interaction scale on the ECERS-R may be a better predictor of a child's good start at school. To summarize, EPPE found that the ECERS-R was a sensitive assessment of those settings' quality which are associated with social progress. The ECERS-E on the other hand, was more related to those aspects of quality which are associated with cognitive progress in young children (Pugh & Duffy, 2006: 170). Clearly, both are important and should be taken into consideration for a proposed South African quality assurance system.

The ECERS has increasingly been used in other countries worldwide by both researchers and practitioners and appears to have become "a global standard and the basis for an increasing body of cross-national comparisons of early childhood institutions" (Dahlberg *et al*., 2002: 98).

A third observational measurement of quality was applied in the EPPE, namely the *Caregiver Interaction Scale* (CIS) of adult-child interaction (Arnett, 1989). This scale has shown how adult interactions shape children's development; specifically, too much permissiveness is associated with poor outcomes and positive relationships lead to cognitive as well as social progress. The EPPE's findings indicated that all children benefit equally from higher-quality provision, indicating that quality is vital; it

is not something needed just by the poor. Taken together, the three observational measures (ECERS-R, ECERS-E and the CIS) demonstrate conclusively that "the type and amount of developmental progress made by children in the preschool period are positively related to quality" (Pugh & Duffy, 2006: 171). This statement is of great importance for my study.

2.7.4 The ECE quality assurance and accreditation situation in Australia

On the other side of the globe, Australia developed their own framework to suite their specific needs. Accreditation schemes generally aim to encourage providers to raise their standards above the minimal requirements set by national regulations and standards. The *Quality Improvement and Accreditation System in Australia* is one example of an accreditation programme that aims to improve the quality of early childhood care and education (ECCE) by defining quality childcare, providing a way to measure the quality of care made available by the service and identifying areas for ongoing quality improvement (CECDE 2004: 14).

Ishimine *et al.* (2010: 67), however report that rapid growth in the provision of early childhood education and care (ECEC) as well as a change in government in late 2007, initiated a commitment towards "a higher level of national quality across all types of early childhood education and care serviced". A new *National Quality Standard* (NQS) was established and implemented from July 2010 until 1 January 2012.

> *The new NQS addressed standardised minimum staff-to-child ratios, work force qualifications and includes a rating system that ranks ECEC services according to their quality. Under a more transparent system agenda, the results of ratings are to be publicly available* (Ishimine *et al.,* 2010: 67).

2.7.5 The ECE quality assurance situation in emerging economies and South Africa

Mooney *et al.* (2003) suggest that accreditation schemes are more commonly found in countries with low levels of publicly funded ECCE services. This is an important

fact to consider in the South African context. Accreditation frameworks can be offered by national or local governments or by professional or voluntary organisations. Because accreditation is voluntary, participation rates can be low.

The ECERS is an imaginative and sturdy tool for research, self-audit and inspection. It has been used in more than twenty countries – from Singapore to Germany to Chile. Countries outside the USA who use it, often do little more than translate the instrument into the national language and make minor modifications to vocabulary or to the type of equipment. With reference to several studies, Sylva *et al*. (2003: 7) give examples of such minor adaptations of the ECERS: it was done in developed countries such as Germany (Tietze, 1996), the United Kingdom (Sylva *et al.,* 1999) and in Portugal (Bairrao, 1996). Elsewhere, in an emerging economy, in Tamil Nadu in India, "researchers such as Swaminathan (2000) have used the ECERS as a conceptual template on which to build a very different assessment system to suit environments and practices which are far removed from the American ECE settings in which ECERS was first developed". I think it might be interesting and surely informative and possibly useful or beneficial for South Africa to investigate their adaptation.

In South Africa the institutions offering early learning and care differ enormously. As Marais (2010: 2) indicates, "some are extremely well resourced, while others lack even the most basic needs, such as water and electricity. Overcrowded classrooms, poverty and lack of leadership skills when dealing with crisis situations are part of everyday realities".

In South Africa, since 1994 a "number of policies have been implemented and legislation promulgated to create a framework for transformation in education and training" (Christie, 2008: 159). One of the prominent documents, *The White Paper on Early Childhood Development* (2000), announced that provision will be made "for the expansion and full participation of 5–year–olds in preschool reception grade education by 2010 as well as for an improvement in the quality of programmes, curricula and teacher development for 0 to 4–year–olds, and 6 to 9–year–olds" (Christie, 2008: 159). Unfortunately the anticipated date of implementation did not materialise and the parameters were moved towards 2014.

In 2010, the former Department of Education was divided into two different departments, namely the Department for Basic Education (DoBE) and the Department for Higher Education (DoHE), each with its own minister, different focus and different responsibilities. In the Government Gazette of August 2010 (p17–18) Minister Angie Motshekga announced the *"Action Plan to 2014: Towards the Realisation of Schooling 2025"*. Goal 11 of the Action Plan is to "improve the access of children to quality early childhood". In the document the minister raises the question "What is the problem?" and then provides the following explanation:

> *Studies from around the world, including South Africa, have shown that good pre-primary schooling below Grade 1 makes it easier for a child to learn at primary school. Yet not all South African children get to attend pre-primary classes. The situation has improved in recent years. Between 2003 and 2008 the percentage of Grade 1 learners who had received some pre-primary schooling increased from 60% to 80%. But we want that figure to be 100%, and government's target is in fact that all children who will be starting Grade 1 in 2015 should be in Grade R during 2014.*

To answer her next question, "What is government doing?" she provides the following explanation:

> *Spending on pre-primary schooling by government has increased more than spending in any other area in education. By 2011, spending on ECD will be four times what it was in 2006 in real terms (in other words, after inflation has been taken into account) (DoBE, 2011: 17–18).*

Christie (2008: 133) points out that there are many examples of policies that demonstrate the complications of educational change in South Africa. She argues that in reality, "every policy intervention across the system, from early childhood development to higher education, proved to be more complex and contested than anticipated". To change educational practice is not straightforward, especially because opposing views and personal interests on every issue exist: "finance; governance; curriculum; teachers' conditions of work, qualifications and remuneration; assessment and qualification systems; management systems;

provisioning; training; inclusion and special needs education; and so on". Many factors influence a policy process (Christie, 2008: 133).

2.8 CONCLUSION

Evans (2005: 9) proclaims that in the 1960s, with the creation of preschool approaches, "there was an implicit assumption that if we could find one model that worked best it could be implemented everywhere". With time, however, people attempted to transmit models from one setting to another and then learned "that there is no single model of provision that meets the holistic needs of children (i.e. no one model of preschool provision – no matter how well researched – works in all settings)". The same pertains to quality assurance frameworks. Quality-measurement is context-specific; therefore measuring tools are often not suitable to transfer directly from one context to another (CECDE 2004: 31-32).

The above mentioned insight is obviously applicable to the South African early childhood education situation as well. To quote Evans (2005: 9):

> *A vision and set of goals cannot be imposed on systems or people; they need to be part of developing and then implementing them. Necessarily that means that not all people can be involved in all programmes. Different groups of people need to be brought together for different purposes, and all the stakeholders relevant to the situation need to be part of the process. When all stakeholders have a voice and contribute resources accordingly then the state will lead more effective and sustainable programmes.*

In this chapter, I explored the literature to capture what has been researched and documented about quality in early learning centres globally and also in South Africa. I reviewed the literature on quality and quality assurance frameworks and identified a significant gap in the literature in terms of available quality assurance measures and accreditation frameworks for the evaluation of quality in early learning centres in South Africa. In the next chapter, I provide a detailed explanation of the research design and methodology used in my study.