

UNDERSTANDINGS OF EMOTIONAL SALIENCE IN A PRESCHOOL CLASSROOM

by

PAMELA WALLBERG

B.F.A., The University of British Columbia, 1998

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## **Abstract**

The purpose of this research was to examine the ways in which preschoolers use artistic, kinaesthetic and linguistic modes of expression to recognize, label and understand feeling words of varied salience within a classroom environment. The ways in which a multi-modal approach towards emotional literacy in the classroom supported emotional literacy is examined. The research site was an urban preschool classroom in the lower mainland of British Columbia. Seventeen three-and-four-year-old children created drawings, kinaesthetically posed, and discussed feeling words of varied salience: 'calm', 'happy', and 'ecstatic', which served as the primary data source, supplemented with teacher observation notes. Analysis found that each mode offered unique insights into how young children recognize, understand and label feeling words of varied salience. Limitations of this study are discussed and suggestions for further research are offered.

## **Preface**

This thesis is an original, unpublished work by the author, Pamela Wallberg. The data collected was covered by UBC Behavioural Research Ethics Board, titled 'Democracy in Early Childhood Education', ethics certificate number H10-01788.

All artifacts, including photographs, drawings and classroom discussion transcripts were gathered by the classroom educators at the research site.

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## Understandings of Emotional Salience in a Preschool Classroom

### Chapter One: Introduction

*Allison (3 years old) and Lindsay (4 years old) are in the classroom writing area. It is a small space that requires children to share work space as well as materials. This often creates social interactions that, in a different space, would not typically occur when children are involved in independent work. On the table are papers of various colours, magazine pictures, pens, a glue bottle, and a pair of scissors.*

*The two girls have been working quietly, cutting and drawing and sharing the materials without issue. Soon, an argument breaks out, growing louder and louder. The girls are both becoming quite agitated and the teacher prepares to step into the conflict to help mediate. Before she can, Lindsay turns to the boxes holding emotion ribbons behind her. She scans the boxes, grabs a dark blue ribbon and hands it to the teacher. Allison is watching and listening, intently.*

*"I am feeling sad. Allison won't let me cut and is taking my scissors." The teacher writes down Lindsay's statement on the ribbon, choosing to follow the children's lead in resolving this conflict. She knows that scissors and cutting are one of Lindsay's favourite activities; further, as Lindsay has been cutting her hair at home she is no longer allowed to use scissors outside of school. Scissor sharing is a difficult task for Lindsay, and it can quickly trigger intense feelings in her.*

*Lindsay takes the ribbon from the teacher and goes to hang it up on the classroom emotion tee pee, across the classroom.*

*Addressing the teacher, Allison says, "Well, I'm feeling stanxious."*

*"Anxious?" the teacher clarifies.*

*"Yes. Lindsay is going to cut up my picture." The teacher helps Allison find the 'anxious' ribbons, writes her statement on the ribbon, and hands the ribbon to Allison. At the tee pee, Allison tells Lindsay what her ribbon said. In turn, Lindsay tells Allison about her ribbon. The girls look at each other's ribbons, and then help each other hang the ribbons up on the tee pee. They then return to the writing area, and to their work.*

### **Purpose of the Study**

As is common in any complex social structure, early childhood education environments are rife with struggles to resolve conflict. As illustrated above, social interactions hold inherent tensions, and social interactions that facilitate the exchange of diverse perspectives and values are often emotionally charged. In an early learning environment, which for many is their first independent social experience, children become a part of a community made up of individuals with diverse values, beliefs, experiences and norms. Active participation in this community can be a child's first experience with active citizenship as they contribute to the creation of a community of learners that respects and values the diverse individuals within the group.

Navigating this environment successfully requires a constant integration of emotional information and cognitive processes (Damasio, 1994). "Transactions among people [are] the primary focus for feelings to be experienced, observed or inferred, talked about and elaborated into expectancies for guiding one through future interpersonal interactions" (Saarni, 1987, p. 536). It has been argued that emotional education is essential to support young children as they participate within their learning environment (Brackett, M.A., Rivers, S.E., Salovey, P., 2011; Denham, 2007; Denham, S.A., Warren, H.K., Von Salisch, M., Benga, O., Chin, J.C., Geangu,

E., 2011; Durlak, J., Weissberg, R., Pachan, M., 2010; Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, T.D., Schellinger, K.B., 2011; Izard, C.E., Trentacosta, C.J., King, K.A., Mostow, A.J., 2010; National Scientific Council on the Developing Child, 2004; Zigler, E., Gilliam, W.S., Jones, S.M., 2006).

A large body of literature exists examining emotional development (Denham et al., 2011; Denham & Kochanoff, 2002; Saarni, 1999) defining emotional intelligence (Mayer, Salovey & Caruso, 2004; Mayer & Salovey, 1995) and making a case for an educational focus on social-emotional development (Ashdown & Bernard, 2012; Durlak et al., 2010; Durlak et al., 2011). However, a much smaller body of research has looked specifically at emotional literacy in childhood (Brackett et al., 2010; Harris et al., 1987) and fewer still have considered emotional literacy in the toddler and preschool years (Denham & Weissberg, 2004; Eisenberg et al., 2005; Figueroa-Sanchez, 2008; Ridgeway et al., 1985). Of these studies, virtually none have examined emotional literacy as it emerges and is learned in an early learning environment. Since this study takes a naturalistic look at emotional literacy in the preschool classroom, psychological frameworks in early childhood emotional literacy rather than the philosophical frameworks (Nussbaum, 2006; Nussbaum, 2002) that have been put forward in considering emotional literacy and education inform its design.

To better understand the capacity of very young children to develop and exhibit the skills inherent in emotional literacy, there is a need for research in naturalistic environments: observational work of children as they make meaning of a wide range of emotional states, using a variety of multi-modal forms of expression that are used in the children's day-to-day preschool life. Such research would begin to address questions such as: which emotion states and feeling

words can preschoolers recognize, label and understand? In which ways do preschoolers demonstrate these understandings and how do multi-modal forms of expression facilitate the expression of emotional literacy? The answers to these questions will help facilitate further dialogue in early learning environments committed to fostering children's active citizenry.

This study aims to contribute to this gap in literature by considering emotional literacy as it was learned through a preschool classroom project – the “emotion tee pee” project.

### **Research Questions**

In the context of a preschool classroom project – the “emotion tee pee” project – I aim to answer the following questions:

1. In what ways do preschoolers use artistic, kinaesthetic, and linguistic modes of expression to recognize, label and understand feeling words of varied salience within a classroom environment?
2. In what ways do multi-modal explorations of feeling words of varied salience facilitate ways of recognizing, labeling and understanding feeling words?

### **Emotional Experience**

Emotional life occurs within a social context. Situations, which elicit emotions in children, are influenced by parents and caregivers, siblings and peers. Emotions are “identified and distinguished by their unique feeling and accompanying thoughts, psychological and biological states and associated behaviours” (Maurer & Brackett, 2004, p. 13). Through interactions with peers and educators, children encounter stimuli, which trigger emotions. As children encounter a growing variety of emotions, they will begin to develop emotional competence: the ability to express, regulate and understand emotions (Denham, 1998; Bosacki &

Moore, 2004). It is through relationships and social interactions that children learn acceptable norms for emotional expression, how to cope with emotions and even appropriate reactions. (Harris, 1998; Lewis, 2011 b) “Almost every behaviour involved in maintaining social interactions and relationships involves emotional experience and expressiveness, understanding of emotion, emotion regulation, or some combination of the three” (Denham & Burton, 2003, p. 14).

**What is emotional literacy?** Emotional literacy is grounded in emotional intelligence theory (Denham, 1998; Mayer, Salovey & Caruso, 2008; Saarni, 1999). Emotional intelligence can be defined as “the ability to monitor one’s own and others’ emotions and to use the information to guide thinking and actions.” (Reis et al., 2007) Emotional literacy refers to the acquisition and development of the specific knowledge and skills used to identify, interpret, regulate and modify physiological, cognitive and behavioural responses accompanying emotional experiences (Brackett et al., 2010; Perry, Lennie & Humphrey, 2008).

**Benefits of emotional literacy.** In a meta-analysis of 213 school-based, social-emotional programs, Durlak et al. (2011) found that social-emotional learning programs increased pro-social behaviours, and reduced conduct problems as well as improved academic performance. Literature extolling the positive academic outcomes from social-emotional learning programs, from improving achievement test scores, (Hawkins et al., 2004; Wang, Haertel, and Walberg, 1997) to increasing school engagement, to deepening subject matter understanding (Elias, 2004; Schaps, Battistich, & Solomon, 2004) is extensive.

Specifically looking at emotional literacy, numerous studies have found that children with strong emotional literacy experience more positive emotions, have good social skills, strong

friendships, are highly regarded by their peers and teachers, and feel secure in their friendships. Compared to children with lower emotional literacy, they are less likely to experience anxiety, hyperactivity, or aggression. (Brackett & Mayer, 2003; Brackett et al., 2010) Social and personal competence is increased in children with strong emotional literacy skills: they are better at recognizing and understanding emotional expressions in others, leading to increased ease in gaining group entrance, managing complex social interactions, and maintaining more positive peer relationships (Denham, 1986; 1998). Children with high emotional literacy are also more likely to express appropriate emotions in various contexts and use adaptive strategies to deal with negative or upsetting emotions (Lewis & Michael, 2011).

There are clear benefits to developing emotional literacy: from supporting the development of key skills required for social functioning, to improving academic performance. To support emotional literacy in the classroom, early childhood educators need to have a strong understanding of how preschoolers experience and develop emotional literacy. However, there are significant gaps in emotional literacy research for young children. The majority of research studies looking specifically at emotional literacy skills have been in laboratory settings and have primarily looked at only four emotions (happy, sad, angry, afraid), despite evidence that suggests preschoolers use and understand a wide variety of feeling words that denote varied emotional salience. Research has been focused on which emotions children can identify and, developmentally, when - with only minimal studies including preschool-age children (with only cursory attention paid therein to the multimodal tools children use to build emotional literacy skills), yet this research continues to limit itself in terms of the emotions considered. Finally, despite the social aspect to emotions, research has failed to consider the ways that a social group

environment might impact emotional literacy acquisition within a classroom. This research aims to address a gap in this literature, and considers the ways that young children explore emotional literacy within a pre-school classroom context.

### **Definition of Terms**

For a clear understanding of the terms used throughout this thesis, the following definitions are provided:

**Basic and complex emotions.** Basic emotions include emotions that are evidenced in the first year of life. Infants exhibit a range of basic emotions, and preschoolers exhibit a wide range of emotions similar to adults (Lewis, 2008; National Scientific Council, 2004). These basic emotions include joy, sadness, fear, anger, disgust and interest. As toddlers enter the preschool years, most can identify basic emotions, with a better understanding of positive emotions and situations compared to negative emotions and situations (Bosacki & Moore, 2004; Joseph & Strain, 2003; Ridgeway, Waters & Kuczaj, 1985).

Complex emotions, which have also been referred to as self-conscious, secondary or social emotions, are influenced by socialization, and include embarrassment, jealousy, empathy as well as self-conscious evaluative emotions: shame, guilt, hubris and pride. (Lewis, 2011 b) As self-recognition and self-other differentiation develops, so does the ability to experience more complex emotions. Self-awareness allows for the experience of envy or embarrassment; combined with an understanding of rules or norms, self-awareness also leads to the experience of shame or guilt. Socialization contributes to the transmission of norms and provides a foundation for a child to experience success or failure; once a child is aware of the 'right' thing to do, he or she is able to measure their own achievement against social standards (Bosacki & Moore, 2004;



Denham, 1998; Lewis, 2011).

Both basic and complex emotions can be observed through verbal and non-verbal behaviours and encompass the cognition, feeling state and physiological arousal, impulse to action and behavioural display that occur in response to a stimulus event (Bocchino, 1999; Plutchik, 2001).

**Emotion family.** An emotion family is a group of emotional states that are similar in valence and emerge from similar stimuli but differ in salience.

**Feelings.** Feelings refer specifically to the “private, mental experience of an emotion” (Maurer & Brackett, 2004. p. 21).

**Feeling words.** Feeling words are vocabulary terms that include words for basic and complex emotions as well as words referring to “motivational and relationship states” (Brackett et al., 2011).

**Valence.** Valence refers to the pleasantness or unpleasantness of an emotion or feeling word.



*Figure 1. Valence*

**Salience.** Salience refers to the intensity level of an emotion or feeling word.

High Intensity



Low Intensity

*Figure 2. Salience*

**Pedagogical documentation.** Rinaldi (2006) proposes that pedagogical documentation combines the artefacts and observations generated within the classroom with educator reflections and interpretations about the event(s) observed. The documented children's words, actions, and works combine with the educator perspectives and thoughts, which in turn may lead to more reflection and thought - creating an ever-evolving piece of 'pedagogical documentation'.

## **Chapter Two: Theoretical Framing**

This chapter contains a review of relevant research in emotional literacy, both in education and in early childhood. I examine literature considering emotional recognition, labeling and understanding in early childhood development. I argue that kinaesthetic, linguistic and artistic languages are meaningful modalities through which preschoolers can demonstrate emotional literacy. I then introduce multimodal analysis and the specific tools with which I explored my research questions.

### **Relevant Literature**

The following sections discuss the rationale for emotional literacy education in early childhood education environments. I summarize relevant literature which investigates emotional literacy in early childhood, specifically, the abilities of emotional recognition, labeling and understanding.

**Emotional literacy in early childhood education.** Given that emotional literacy develops within a social context, early childhood learning environments are well situated to attend to children's emotional literacy, the development of which is considered one of the "most challenging tasks of the preschool years" (National Scientific Council, 2004). Children spend a significant portion of their most formative hours in school, and when considering that a child in daycare may spend up to eleven hours a day, five days a week, in a child care environment, the choices made in early education settings as to what is of curricular importance can be impactful. Through supporting the development of emotional literacy, early childhood learning environments are able to provide children with skills that are essential to successfully navigate social life (Denham et al., 2011; Denham, 2006; Lopes et al., 2004).

Dahlberg and Moss (2004) argue that there is a choice that society makes when determining what early childhood education environments are and can be. “There is nothing inevitable about it: there is more than one way in which we can think about and provide these institutions.” (Moss, 2007, p. 1). Early education environments can be places of childcare for the young, thus enabling parents to work. They can be schools designed to impart specific, established knowledge and skills with predetermined outcomes including that of continually preparing children for the next step in the public schooling system. When considering the goal of education as one of graduating from secondary school meeting a basic expectation of predetermined outcomes, there is a growing argument that emotional literacy is a vital piece of this educational puzzle (Heckman & Masterov, 2007). The association between social emotional learning in general, and emotional literacy specifically, and positive academic outcomes has been increasingly established in a breadth of studies (Durlak et al., 2011; Durlak et al., 2010; Christenson & Harvey, 2004).

There are equally persuasive arguments to be found for SEL and an emotional literacy curriculum when considering early education to hold a democratic purpose and to be filled with possibilities for citizenship education. Democratic practice and education have long been associated. Kant proposes that free thinking could only come to be through education, that education prepares the individual for democratic life (Sandel, 2009). Dewey suggests that education provides a forum for individuals to be shaped into participatory citizens. More recently, Arendt (1977) offers a political connection between education and democracy; Arendt suggests that citizenship is realized only through social interaction. Within the public sphere, where individuals interact with others who are different from themselves, life is experienced

through social interactions the tensions created when individuals “bring their beginnings and initiatives into the world of difference and plurality” (Biesta, 2007, p. 757). Educative environments can serve as a space in which these tensions are created and explored, thus providing the space for children to experience citizenship. Rather than creating an adultist norm for citizenship, locating citizenship within social interaction allows early education to become a site of political practice (Coady, 2008; Moosa-Mitha, 2005). Indeed, the 2006 Organisation for Economic Cooperation and Development (OECD) review on early childhood education and care suggests that early education systems should serve to “enhance understanding of society” and support broad participation for children as citizens.

Considering how to apply this view of education to the more tangible implementation of in-class curriculum inevitably leads to emotional literacy. Accepting that early education is a social institution for early experiences of citizenship, and additionally understanding that social life can not be separated from the myriad of emotional experiences that social interactions bring, emotionality can not be separated - or worse, ignored - in early education. “If we think of emotions as essential elements of human intelligence, rather than just as supports or props for intelligence, this gives us especially strong reasons to promote the conditions of emotional well-being in a political culture: for this view entails that without emotional development, a part of our reasoning capacity as political creatures will be missing.” (Nussbaum, 2003. p 3). Education in emotional literacy specifically offers a basis for addressing emotional well-being.

Having considered some possible viewpoints advocating for emotional literacy education, I now move to a more detailed examination of literature, which looks more specifically at the components found in emotional literacy. Despite the varied approaches to emotional literacy in

education, including a more philosophical stance of Nussbaum and others, for the purpose of this study, a psychological framework seems more fitting. Since this research is considering the specific ways in which young children recognize, label and understand feeling words of varied salience, a psychological framework serves to support developmentally appropriate practice in this area of emotional literacy.

The components of emotional literacy are described and detailed in terms of their relevance to this research. No one ability is given more weight than the other; rather, each ability is one part contributing to emotional literacy, just as phonemic awareness and symbolic deciphering contribute to reading literacy.

**Components of emotional literacy.** My survey of research in emotional literacy suggests that there are three critical components to emotional literacy: the ability to recognize, to label and to understand feelings in self and others (Bocchino, 1999; Brackett & Kremenitzer, 2011; Joseph & Strain, 2003)

***Emotional recognition.*** Emotional recognition includes the ability to recognize specific emotional states as they are kinaesthetically and verbally expressed, in self and in others. This includes recognizing facial expressions, body language, and utterances.

Numerous studies have supported the finding that preschoolers are most competent at recognizing happiness, followed by sadness, anger and finally, fear (Denham & Couchoud, 1990; Denham, 1998; Camras & Fatani, 2008; Tarpey, 2010). These studies have relied on two primary methods. One method asks children to identify an emotion in a picture, either by asking “which face is the (feeling word) face” or by asking “what is this face feeling?” The other method involves a puppet show or story, and then asks children to either point to a face that

shows how a character in the show or story is feeling or asks children to say how the character is feeling. As such, these studies have heavily relied on child vocabulary or on the recognition of static “emotion face” images. These studies have also been limited to the four emotion states of happy, sad, angry and scared.

One study which considered multiple communication methods has suggested that preschoolers learn to identify, label and categorize emotions not primarily through facial expressions, but through narrative structures (Widen & Russell, 2010). Presenting children with either photographs of facial expressions or stories of cause and consequence, Widen and Russell found that cause and consequence stories result in more accurate emotional identification for happy, anger, fear, surprise, disgust, contempt, embarrassed, compassion and shame. However, images of facial expressions result in more accurate emotional identification for surprise. This face superiority effect has been found for sadness and anger in other studies (Widen & Russell, 2002). This finding suggests that not only do narrative structures, such as cause and consequence, and observed incidents, play a role in the development of emotional recognition, but that the ability to recognize different emotions may actually first rely on differing cues, depending on the emotion.

Nelson and Russell (2011) studied 144 preschool aged children to determine how face-only, body posture-only, voice-only and multi-cue emotional communication was labeled, when considering happy, sad, angry and scared. They found that the children in the study were typically able to correctly label the visual cued emotions rather than the voice-only emotions for happy, sad and angry, and the majority of children were able to correctly label scared. While there is not extensive research into the breadth of cues young children use to recognize emotions,

research seems to agree that as children develop, they eventually appear to rely on multiple cues, including facial recognition, body posture, and narrative structures, to identify emotion in self and others.

***Emotional labeling.*** The English language contains a remarkable expanse of emotion-descriptive language. In order to demonstrate emotional understanding and to correctly identify emotions in self and others, each emotion must be distinguished and labeled. Brackett and Kremenitzer (2011) refer to this labeling as a feeling-word vocabulary. A rich feeling-word vocabulary enables children to better discriminate between emotional states and to improve communication about emotions (Denham, 1998). It can help to distinguish between the gradations of feelings as well as identify the myriad feelings that combine to create complex emotional states. Further, as emotions may be difficult to read from facial expressions and even body posture, emotional labelling serves a role in providing context for emotional perception. Emotion words, therefore, “serve to reduce the uncertainty that is inherent in most natural facial behaviours and constrain their meaning to allow for quick and easy perceptions of emotion” (Barrett et al., 2008). Importantly, labelling emotions improves emotional regulation through diminishing the amygdala response (Lieberman et al., 2007; Eisenberg et al., 2005).

Acquisition of a feeling-words vocabulary begins in infancy and preschoolers exhibit a rich emotional vocabulary, both in terms of receptive and expressive language (Ridgeway, Waters & Kucaj, 1985).

Widen and Russell (2008) have proposed the Differentiation Model to explain how children come to label emotions. In their 2008 study, 168 preschoolers were asked to label facial expressions of six emotions. A box was then provided for the children to place all and only



pictures of a particular emotion within the box (i.e., angry). This study found that children appear to categorize emotions differently from adults, with emotion categories beginning broad and gradually narrowing over the preschool years, moving towards an adult-like understanding of emotion categorization. In this study, children first began categorizing (and thus labeling) emotions as happy / not happy, and then slowly increased the possible categories that the plethora of emotions could fall into. Widen and Russell found that categories seem to emerge systematically, as follows:

Labeling Level 0 – no labels (unable to identify emotions)

Labeling Level 1 – one label: happiness

Labeling Level 2 – two labels: happiness and sadness or happiness and anger

Labeling Level 3 – three labels: happiness, sadness, anger

Labeling Level 4 – four labels: adding either surprise or fear

Labeling Level 5 – five labels: happiness, sadness, anger, surprise, fear

Labeling Level 6 – six labels: happiness, sadness, anger, surprise, fear, disgust

This study offers important implications for emotional education. Children who use low labeling levels may use specific feeling words to label an emotion, such as happy, sad or angry, but may be referring to a different emotion than what the adult-use of the feeling word implies. For example, a child at labeling level 3 might say they feel happy, but may actually be experiencing the adult understanding of surprise; a child at labeling level 2 might say they feel sad, but are experiencing what adults understand as afraid. Initial labeling levels consist of categories that are far more broad and inclusive than adult understandings are. As children progress to higher labeling levels, they are better able to differentiate between a wider variety of

emotions.

***Emotional understanding.*** Emotional understanding is the synthesis of emotional recognition and labeling, resulting in the ability to act (Eisenberg et al., 2005). It identifies which emotions and emotional expressions may be appropriate in a particular context, as acceptable emotional expression differs depending on context. Emotional understanding, therefore, is pivotal in emotional regulation, as it creates the link between emotion, context, and action. This ability is exhibited at a very young age. Preschoolers are able to utilize different modes of expressiveness as well as inhibit or intensify expressiveness, depending on the context (Denham, 1998). For example, despite the actual feelings experienced when receiving a gift, emotional regulation can allow children to respond in a positive manner (Saarni, 1984; Saarni & Von Salisch, 1993). Saarni's 'disappointment paradigm', in which children are given a disappointing present, has allowed for children to be observed while they attempt to mask disappointment. Cole, Zahn-Waxler and Smith (1994) and Lieu et al (2004) studied preschoolers' abilities to mask disappointment, and found that children able to do so were seen as socially competent and well adjusted.

Emotional understanding requires recognition of the causes and consequences of emotional expressions (Eisenberg et al., 2005). The ability to create emotion-situation linkages exhibits itself at a young age. Preschool children have shown the ability to cite social, nonsocial and internal causes for emotional states (Denham, 1998). Pons, Lawson, Harris and De Rosnay (2003) presented preschool and school-aged children with stories illustrating a particular context. The children were then asked to attribute an emotion to a character from the story, from provided drawn facial expression images. While emotional understanding improved dramatically with age,

preschoolers demonstrated a vast individual range of emotional understanding, with some of the preschoolers exhibiting a level of emotional understanding equivalent to or higher than the lowest scores of emotional understanding in the ten-to-eleven-year-old group. Clearly, while emotional development seems to be progressive with age, there appear to be as-of-yet unexplained, vast differences in individual development.

The aforementioned literature has considered the developmental possibilities of emotional literacy with preschoolers. The limited studies clearly show that preschoolers have a significant, although individually varied, ability to recognize, label and understand emotions of varied valence. While the breadth of the emotional valence has yet to be definitively quantified, all research is in agreement that the emotional state of ‘happy’, at a minimum, is one that is easily understood by preschool aged children. However, there is no research addressing the grasp preschool-aged children have of emotional salience, even within the limitations of feeling words/states within the emotion family ‘happy’. This study will position itself within this gap, concerning itself with emotional salience, as opposed to valence, and limiting itself to feeling words describing varied intensities of ‘happy’.

### **Multimodal Expression in Children**

In order to respect the varied communicative abilities of young children and not place undue focus on language-dependent modes of communication, it is important to consider multimodal forms of expression. This is particularly important when working with young preschoolers or toddlers, as this population may have low-verbal ability. Multimodality refers to the myriad ways one can communicate, including images, gestures, facial expressions and language. In the following sections, I discuss multimodal expression in early childhood as

recognized in pedagogies such as the Reggio pedagogy and methodological frameworks, such as the mosaic approach.

**The Reggio pedagogy.** Malaguzzi, whose theories form the initial basis for the pedagogy found in Reggio Emilia, Italy, purports that children have ‘one hundred languages’ (Reggio Children, 2006). These ‘one hundred languages’ of children refer to “the many communicative possibilities with which our species is genetically equipped” (Vecchi, 2010, p. 18). The one hundred languages does not refer to a collection of discipline-based points of view on a given topic, but rather describes an interweaving of disciplines, each contributing a unique perspective that interacts with other perspectives, ultimately leading to a richer and more complex understanding (Vecchi, 2010). Rather than working in isolation, each language supports and deepens the other in synergistic collaboration (Edwards et al, 1998). The Reggio pedagogy recognizes that the multimodal ways young children communicate combine to create a complex picture of understanding. Thus, researchers interested in exploring children’s understandings of any topic should consider examining multiple modalities. Rinaldi (2006, 2001) describes the process of ‘visible listening’ an iterative exchange of ideas that gives weight not only to verbal dialogue, but equally to observations, video, photographs, transcripts and child-generated artwork. In this process of ‘visible listening’ Rinaldi recognizes that the role of the observer/teacher is an active one.

**The mosaic approach.** The Mosaic approach positions young children as “experts in their own lives” (Langsted, 1994, p. 42), recognizing children have important perspectives to offer. Importantly, the mosaic approach works to find methodologies, which utilize children’s strengths, and as such, rules out many traditional methodological approaches such as formal

interviews or questionnaires, creating space for a variety of verbal and non-verbal modes of communication utilized by children. Children's voices are supported through alternate communication methods, including the use of narrative accounts of observation, child conferencing, child-taken photography, child-produced drawings, and interviews with staff and parents working with the children (Clark, 2004). There are two stages in the mosaic approach: stage one involves children and adults gathering documentation and stage two requires the information to be pieced together, spurring dialogue, reflection and interpretation (Clark, 2004).

**Multimodal expressions of emotional literacy.** A Vygotskian model of development begins with the assumption that understanding is first social and later is internalized. Essentially, the act of doing precedes the ability to linguistically 'understand'; that thought precedes language (Vygotsky, 2012). Bruner (1957) builds on this when he suggests that there are three key modes of representation: inactive representation (action-based), iconic representation (image-based) and symbolic representation (language-based). Bruner posits that language - symbolic representation - facilitates flexible thought, but understanding is not limited to language. Considering Bruner's three modes of representation, it could be expected that children, in expressing their understanding of feeling words, might do so through all three modes: inactive, iconic and symbolic representation. This study considers multiple modes of expression, which reflect inactive, iconic and symbolic representation. Considering multiple modalities rather than only one mode of expression may provide a clearer picture of how children explore emotional literacy within the classroom.

In this section, I explain three modalities frequently used within an early learning classroom context: kinaesthetic, linguistic and image-based. For each modality, I then review the

limited literature and research related to the particular modality and emotional literacy. As this research will examine three modalities - artistic renderings, kinesthetic posing in photographs and linguistic statements - a survey of each of these modalities within the literature will provide context for analyzing the multi-modal data collected in this study.

***Kinaesthetic modalities.*** Posed emotional expressions are kinaesthetic expressions that are purposely made of a particular emotion in the absence of that emotion (Gosselin, 2011). Posed emotional expressions are an important part of emotion, as they contribute to social performance. Specifically, the ability to pose an emotional expression allows individuals to modulate, up-regulate or deregulate an emotional expression. Posed emotional expressions enable children to produce emotional expressions independent of the emotional state, which is a required skill for conforming to “display rules” - social norms that dictate the societal acceptability of particular displays of emotion in a given situation. Display rules are learned from a very young age, through direct instruction, observation, and imitation. While basic emotions are considered universal (Ekman et al. 1987; Ekman, 1973) display rules, which are transmitted through both public (cultural display rules) and private spheres (personal display rules) differ between cultures (Ekman, 2003). Display rules dictate what emotion should be expressed or concealed. For example, the winner of a hard-won school spelling bee can cry with happiness (as long as they don’t look smug, a range of emotional expression might be acceptable), however, the runners-up must conceal disappointment, anger or sorrow, and look happy for the winner. Display rules can also require a particular emotional salience to be expressed. For example, at a family dinner with visiting relatives, the three-year-old boy is expected to exhibit excitement when his grandmother arrives, even if he is not feeling overly

happy or excited about it.

Posed emotional expression is also required to practice deception. While children are typically urged to be honest, children are culturally taught that deception through message control is a pivotal part of social life, and is thus an important part of emotional literacy (Ekman, 1989). For example, at her birthday party, the four-year-old child who expected a pink, glittery bike with tassels but instead received an unwanted sweater is still expected to smile and say thank you, creating the appearance of liking the gift despite her actual feelings. This creates an added layer of complexity to emotional identification, as the emotion seen or expressed may not be what is actually experienced.

As posed emotional expressions require an understanding of the emotion being posed, the ability to pose an emotional expression can also indicate an ability to recognize, label and understand an emotion.

There is minimal research on children's ability to pose emotional facial expressions and no research considering children's ability to pose facial expressions of varied salience was found.

Odom and Lemond (1972) discovered that there is a lag between the ability to perceive emotional expressions and produce emotional expressions. Considering fear, anger, joy, distress, surprise, shame, disgust and interest in groups of five-and-ten-year olds, children were asked to identify the emotional expression in sixteen photographs or to make facial poses for sixteen emotion-eliciting scenarios. A lag was found between six of the eight emotional expressions, but this lag was not reduced with age. In fact, while emotional expression discrimination improved with age, facial posing ability did not improve to the same extent. Facial posing within the five-year-old group was the most accurate with joy, followed by anger and interest, followed by

surprise, disgust, shame, distress and fear.

In the only study looking at preschoolers, Lewis, Sullivan and Vasen (1987) examined six posed facial expressions of happiness, surprise, anger, fear, sadness and disgust. It was found that, when asked “Can you make a \_\_\_\_\_ face?”, two-year olds, as a group, were unable to pose any facial expression; three-year-olds were able to pose happiness and surprise; and four-and-five-year-olds year olds were able to pose happiness, surprise and sadness; while adults were able to pose all but fear and disgust.

It is possible that the inability to voluntarily produce specific facial actions (i.e., muscle control) is a limiting factor in children’s ability to produce posed emotional expressions. Ekman (1973) examined 15 specific facial actions that are associated with the emotions anger, happiness, disgust, fear, surprise and happiness. Working with a group of five-nine-and-thirteen-year-olds, it was found that posing ability improved with age. In terms of facial actions, all children were able to perform the facial action associated with happiness; most of the youngest children could perform some of the facial actions involved in surprise and the majority of the older children could perform the facial actions for surprise and disgust. The majority of the children could not perform all of the facial actions for fear, sadness or anger. This seems to explain some of the difficulties children have in posing particular emotions; if children are unable to pose specific facial actions, they would be equally unable to produce a posed facial expression requiring that specific facial action. However, this research considered facial actions in isolation, and the kinaesthetic ability to isolate one facial action may not be required in producing a facial expression.

Gosselin et al. (2011) set out to link specific facial action abilities to posed expressions.



This study looked at children's ability to generate the specific facial actions associated with happiness and sadness as well as the posed facial expressions "happy" and "sad". Sixty children in three age groups, five, seven and nine years of age, were presented with pictures and verbal descriptions of appearance changes and asked to pose an emotion - happy or sad. The study found that children were able to best voluntarily pose happiness, but could also voluntarily pose sadness to some degree. The older group of children had more success posing a complete expression of sadness than the younger children; however, there was not a significant difference in ability to pose a complete expression of happiness between age groups. This study did not suggest to children to "imagine" or generate the emotional feelings before posing the emotional expression, although the authors suggest that this may be too demanding for young children.

Each of these research studies has generated valuable insights into children's abilities to voluntarily produce facial expressions. However, there are significant limitations to these studies. The inability to pose a particular expression may be attributed to an understanding of the feeling word, the meaning of the posed expression, or to physiological limitations in controlling facial muscles (Lewis, Sullivan & Vasen, 1987).

Given Widen and Russell's (2008) Differentiation Model, it is possible that children in each of these studies were posing the emotion requested, but within their developmental categorization. For example, a child who had achieved a labeling level 3 ability and was asked to "make a surprised face" may have recognized the feeling word "surprised", but categorized the feeling word as either a happy, sad or angry emotion. The resulting posed expression may then reflect either the adult understanding of "happy", "sad" or "angry", rather than the adult understanding of "surprised", depending on what category the child felt "surprised" belonged in.

This leads to a different conclusion than the one found in each of these studies; rather than concluding children are unable to produce a particular posed facial expression, further research to support the Differentiation Model may be needed.

Widen and Russell's finding that cues such as narrative structures play an equally or more important role in children's ability to identify emotions suggests that studies asking children to pose facial expressions may have results which are more similar to an adult-like understanding of particular feeling words if multiple cues are provided. For example, instead of asking "can you make a \_\_\_\_ face", providing a cause and consequence scenario and asking the child to pose the emotion they would feel in that scenario may result in a different pose.

***Linguistic modalities: "feeling words".***

There is significant feeling word research detailing the frequency and diversity of feeling words used by young children. While the majority of studies have focused only on determining if children can understand and use the terms happy, sad, angry, and afraid, the seminal study by Ridgeway, Waters and Kucaj (1985) set out to determine the breadth of feeling words in preschoolers' vocabulary. No studies were found examining preschoolers' understanding of feeling word salience.

Ridgeway, Waters and Kucaj (1985) surveyed the parents of 270 toddlers, preschoolers and kindergarten children, asking which of 125 emotion-descriptive adjectives their child would a) understand when used to refer to moods or feelings and b) use themselves to refer to moods or feelings. The study, while limited in that it relied on parental reports rather than naturalistic speech samples, found that preschool children have shown significant ability to use and understand feeling words: over 75% of three-year olds were perceived to understand and use

thirteen emotion-descriptive adjectives, including good, happy, sad, afraid, angry, loving, mean and surprised. By the end of the preschool years, over 75% of children were perceived to also understand and use 41 emotion-descriptive adjectives, including comfortable, excited, upset, glad, unhappy, relaxed, bored, lonely, annoyed, disappointed, shy, pleased, worried, calm, embarrassed, hating, nervous and cheerful.

Supporting Ridgeway, Waters and Kucaj's finding that toddlers and preschoolers have a significant emotion vocabulary, Wellman et al. (1995) conducted a longitudinal study looking at available data from the Child Language Data Exchange System (CHILDES) on five children, from ages two to five, evaluating the ability to talk about emotion. They found words used by these children to fall under three categories: words referring to positive emotions, words referring to negative emotions or words referring to pain. Not all of these words were feeling words; the findings include utterances such as "Ouch" or "Yum". It was found that, by age four, ten positive emotion words, fourteen negative emotion words and eight pain words were commonly used. These words were used to refer to, not only the children's own states, situations and behaviours but to other persons, real or imagined.

The aforementioned review of the extent of linguistic abilities found in preschools as it relates to feeling words, has significant implications when considering a holistic approach to emotional literacy - an approach beyond acquiring a vocabulary term. Given the breadth of feeling words that preschoolers access in daily life, there is a significant need to consider preschooler's emotional literacy beyond simply 'happy', 'sad', 'angry' and 'fear'. Programs looking to support the development of emotional labeling, recognition and understanding may be falling short of developmentally appropriate practice by limiting an emotional curriculum to a

handful of simple feeling words.

The RULER approach (Brackett & Rivers, 2014), a school-aged emotional literacy program, examines a significant range of feeling words in terms of both valence (through presenting a range of pleasant and unpleasant emotions) as well as salience (through presenting a range of high energy and low energy emotions). One component of this program, the ‘mood meter’, supports students in identifying feelings and mood states. Through a feeling words curriculum, feeling words are systematically explored, linked to the classroom’s core curriculum.

RULER is piloting a preschool study that introduces the idea of pleasant/unpleasant and high energy/low energy emotions to preschoolers (Rivers et al., 2013). This program seems to be supportive of the research advocating for a complex feeling words vocabulary, which helps children to “become consciously aware of their own and others’ emotions, communicate effectively about emotions, and better regulate emotions and their behaviour” (Brackett & Rivers, 2014, p.16).

**Image-based artistic modalities.** Considering visual images as a mode of meaning making for young children provides a rich field of data for researchers. Modalities such as drawing, photography, painting, sculpture, music, dance and drama are all important forms of meaningful expression, which can hold insights into both social and individual knowledge (Kress and Van Leeuwen, 2006). Kendrick and McKay (2004) suggest that drawing is one modality that can provide children with an opportunity to communicate their experience, knowledge and beliefs around literacy. Kress and Jewitt (2003) have argued that a multimodal approach to literacy must be inclusive of all modes of meaning-making, including image-based artistic modes such as drawing and photography. While Kendrick and McKay are specifically considering

traditional forms of literacy, the idea of drawing as an effective communication method for young children could be extended to other literacies, notable, emotional literacy.

Drawing as a meaning-making modality has been discussed in recent research: Wright (2007) details the richness that can be found in children's drawings, which can include "graphic symbols, which might also include written letters or words, numbers, symbols and graphic devices" (p. 37) Hopperstad (2010) agrees, suggesting that children's drawings are a medium through which children may express ideas in ways that they are unable to do so through verbal language. When drawings are combined with a child's narrative, researchers can ensure that, rather than the aesthetic elements, the meaning-making element of drawing is considered (Einarsdottir et al. 2008). Children's drawings have been a tool for researchers seeking to explore children's understandings on various topics: HIV/AIDS (Mutonyi & Kendrick, 2011), literacy (Kendrick & McKay, 2009), the body (Oskarsdottir, 2006), and the first year of school (Einarsdottir et al., 2008). However, despite the awareness of children's multi-modal communication, few researchers, if any, have considered children's emotional literacy through children's drawings.

There is another advantage to using creative approaches such as drawing, when working with children to construct meaning: while language-based communication is time-pressured, creative tasks are understood to require more time and reflection, where it "seems natural to take time to think about what is to be produced, and how this can be achieved; and furthermore, during the time it takes to make the work, the participant will have spent further time – creative time – thinking about the research issue and their response to it, so that by the end of the process, even if we do ultimately resort to language, they will have developed a set of responses which

may be quite different to what their initial gut reaction may have been.” (Gauntlett, 2005, p. 3)

Similarly, studies into photography as a meaning-making modality with children are limited. Some researchers (Barker & Weller, 2003; Capello, 2005; Clark, 2005) have successfully used photography as a means for children to communicate their understandings with adults. Clark (2004) argues that photography is a powerful language for children, as children “who have seen adults taking photographs and poured over family albums know that photographs are valued in the ‘adult world’. This is not always the case with children’s own drawings and paintings.” (Clark, 2004, p. 145). There is an increasing body of research that utilizes child-generated photography as a means for providing multi-modal tools for children. Clark (2011) argues that photography can “in a literal sense, help others to see these perspectives.” (p. 29) In her research examining child play spaces, Clark provided children with cameras to photograph the outdoor play space. In analyzing the photographs, it was found that photographs provided a completely different field of view than what the researchers had expected, due to the stature of a child when compared to the stature of an adult of average height. This provided important insight into assessing the emotional resonance of the play space. Dockett and Perry (2005, 2011) agree, positing that photography enables children’s voices to be heard, increasing the ways that children can express themselves and be listened to.

That said, studies which have used child photography as a meaning-making modality, have some limitations. While older children can be interviewed about their photograph(s), younger children may have language limitations that require researchers to rely on their own interpretations of the photograph(s). Further, the younger child’s skill with a camera may limit his or her ability to use photographs as a means to effectively communicate meaning. However,

digital technology provides new tools and unique opportunities for children in the classroom: cameras, video cameras and multi-function handheld devices offer children a new way to use photography to both reflect and interpret their perspectives (Harper, 1998). More recently, programs, such as Photobooth or handheld cameras, such as an iPad, allow children to pose and evaluate their images pre-and post-image capture, eliminating some of the requirement for photographic skills that may have been required with a camera.

When combined with drawings, photography can provide a “bridge between the children’s physical experiences of their environment and the two-dimensional nature” of hand drawn work (Clark, 2004, p. 146). In research considering topics such as emotional literacy, this bridge can be an important one: emotions are experienced cognitively as well as physically, and photography can be a tool which supports children’s communication about the physical as well as cognitive experience. For example, a young child may not yet have the vocabulary to verbally express what a feeling word such as “rage” means, but photography can allow the child to kinaesthetically express the feeling word and capture that expression so it can be shared with others. Further, photography offers the advantage of removing the need for fine motor control over a pen or pencil, allowing pre-drawing children access to this communicative tool.

This chapter has provided a review of the current literature in emotional literacy, with a focus on developmentally appropriate understandings of emotional literacy with young children. Positing the importance of multi-modal learning/research and the synergistic implications such an approach can have when working with young children, this chapter has offered a backdrop for this research study. In the following chapter, I will detail the research methodology and design, introducing the early education centre, the students and the teachers who worked together to

create ‘The Emotion Tee Pee’ project, the focus of this research study.



### **Chapter Three: Research Methodology & Design**

This chapter provides the justification for site and participant selection. The data sources used are each described – including teacher-generated transcripts of group time conversations and child-created artifacts such as self-portrait photographs and drawings. I conclude this chapter with an explanation of the data analysis techniques used along with the steps taken to address potential validity threats within the research.

#### **Site Selection**

The early childhood education setting selected for this study was a group licensed child care facility with two classrooms: a 12 student infant-toddler classroom ('the little class') and a twenty-five student classroom ('the big class'). The children in the twenty-five student classroom (the classroom focused on for this study) were divided into three groups: the twos, the threes and the fours. Each group has at least one primary care educator who 'loops' with the group so that there is a consistent primary care educator from the child's start date through to their graduation date.

The facility is a Reggio-inspired centre and the curricular goals are primarily focused on social and emotional learning. As a result, there is very little individual work: children work in small groups throughout most of the day, with occasional large group meeting times. The children construct and participate in much of the day-to-day planning and management of the classroom, including planning learning activities, selecting work groups, and participating in modifying the physical set-up of the classroom.

Typical teaching practices include the collection of data via educator observations and note taking, audio recording, video recording, photographs, and student artwork. This material is

routinely shared with students through classroom meetings and documentation posted in the classroom and with parents, through print and online documents. The educators then collect parent and student feedback and reflect on the feedback and the data itself, which affects the unfolding classroom curriculum. Reflection primarily occurs through staff meetings, and through teacher and parent comments on online blogs. This practice generates a large amount of artifacts and observation notes, creating a rich source of data for a study such as the one being reported.

A key area of teacher observation within the classroom at the time of this research was on developing emotional literacy within the groups in order to promote communication and conflict resolution skills. Each school year, teachers produce a yearbook for each classroom, which documents a major classroom project. Throughout the year, teachers collect student artwork, transcribe conversations and take photographs to use as data for the yearbooks. Teachers selected the “Emotion Tee Pee” project as the focus for this year’s yearbook, as it was a long term project that involved every student in the classroom. As a result of this decision, artifacts and observation notes primarily focused on the “Emotion Tee Pee” project provided a large amount of multimodal data collected as part of regular teaching practices.

I work within the site part time as the school Pedagogical Coordinator. This role requires me to review teacher notes and observations, as they are generated and offer supporting resources or research for the teachers, such as relevant scholarly articles, classroom materials or, at times, in-classroom support. Further, it is my responsibility to make classroom learning visible by creating documentation pieces from teacher notes and observations and child-generated artifacts, which are then displayed in the classroom. The “Emotion Tee Pee” project

and the resulting documentation was considered for this research once the project was well established within the classroom: all 21 feeling words had already been introduced, feeling word salience had been explored for each emotion family and children were placing the finishing touches on their “Emotion Tee Pee” portfolios (which consisted of 21 feeling word drawings and self-portrait photographs). My involvement with the project at the time this research began had been limited to providing SEL research to the teachers as requested, organizing and categorizing child artwork, and offering reflections and comments on teacher observation notes.

### **Project Overview “The Emotion Tee Pee”**

The classroom teachers introduced the Emotion Tee Pee project following a school term marked by particularly high levels of aggression. It was their hope that a focus on identifying and labeling emotions as well as understanding the causes and consequences of emotions would improve the children’s ability to communicate with each other in intense social conflict.

Using Plutchik’s Wheel of Emotions as a guide (Plutchik, 2001), twenty-one emotions were organized into seven families, and designated as “high oomph”, “medium oomph” or “low oomph” emotions. Each emotion family corresponded with a colour, and each emotion corresponded with a shade of that colour. The emotion families were:

Red: Annoyed, Angry, Rage

Orange: Accepting, Trusting, Admiration

Yellow: Calm, Joy, Ecstatic

Green: Apprehensive, Afraid, Terrified

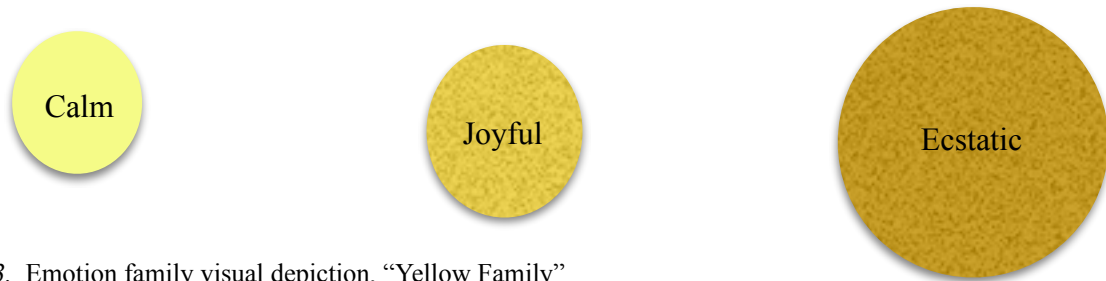
Blue: Pensive, Sad, Grief

Indigo: Distracted, Surprised, Amazed

Violet: Bored, Disgusted, Loath

Displayed in the classroom, each emotion family was visually depicted as in figure 3.

This was done to visually depict the change in salience in each feeling word.



*Figure 3.* Emotion family visual depiction, “Yellow Family”

Teachers hypothesized that introducing the children to a variety of feeling words within an emotion family might help children recognize “high oomph” emotions. High oomph emotions require various coping strategies so that children can function in a social context without being overwhelmed, or overwhelming others. After recognizing that an emotion can have different intensities, it was hoped children would feel more confident in regulating their emotions.

The feeling word of the week was posted Monday morning on the front door of the school, and remained posted for the entire week. Every morning, when children arrived at school parents would enter the classroom with their child and together the parent and child would fill out a coloured ribbon, writing what children stated would cause them to feel the particular emotion. By Friday of each week, each child had created five different emotion ribbons and engaged in five discussions with their parent(s) about one feeling word. Teachers read these ribbons during group time each day, beginning a larger group time conversation about the emotion.

During the group time conversation, teachers would facilitate discussion about the emotion, including defining the emotion, identifying causes and consequences of the emotion, recognizing emotional facial and body expressions, and discussing ways to ‘feel differently’ if the emotion was unwanted, or too “high oomph” or “low oomph” for a particular context. In addition to group discussions, teachers would introduce emotions through social story telling, books and teacher plays.

After the twenty-one feeling words were explored, the teachers next introduced “emotion family” weeks. During the emotion family week, a specific emotion family was explored, rather than a specific feeling word. Parents and children continued to create emotion ribbons when they arrived at school in the morning, however this time they were given a “Pretend That” scenario to consider. They were asked to link a specific emotional salience to the scenario and write this on their ribbon. For example, one “pretend that” scenario from the yellow emotion family week read: “Pretend that...Your Mommy is picking you up from school and taking you to Starbucks...would you feel Calm, Joyful or Ecstatic?”

As in the feeling word weeks, teachers read the emotion ribbons during group time. Group discussions focused on comparing and contrasting the different emotions within an emotion family. Finally, the emotion families and feeling words were explored through artistic media. While the year-long focus within the school atelier was on artistically depicting emotions, all of the children used two media for all of the feeling words: photographic self-portraiture and drawing.

Children were asked to draw portraits depicting each feeling word. Working in small groups of two to six children and a teacher, children were asked to draw three portraits – one for

each feeling word within an emotion family. Over a period of seven weeks, this exercise was repeated seven times, once for each emotion family.

Each child was asked to create a photographic self-portrait, kinaesthetically posing each feeling word, using the program Photobooth. Working in small groups of four to six children and a teacher, children took individual photos of each feeling word. Photos were taken over a period of seven weeks, after each feeling word had been introduced, discussed, and artistic renderings had been drawn.

### **Data Sources and Collection**

Interacting with children, or observing them, in natural settings allows data to emerge and can best allow researchers to understand emotional competence (Denham, 1998). To ensure the least possible intrusion and maintain the most naturalistic setting possible, I chose to collect the data previously collected by the teachers. That is, for this research, teachers provided all observation notes, documentation and child artifacts that were generated during the school year, as a part of regular teaching practices. Since teachers were focusing on the “Emotion Tee Pee” project in their observation and documentation efforts, the majority of data collected focused on the “Emotion Tee Pee” project.

Data, which the teachers provided, included child written emotion stories, the Emotion Tee Pee ribbons, teacher blog postings from class websites, teacher notes documenting child interactions, transcripts from group time discussions, photographs of children kinaesthetically representing each feeling word through posed expressions and artistic work completed by each child. Additionally, an electronic file of the yearbook entitled “The Emotion Tee Pee” was also provided.

Any data that was not related to the “Emotion Tee Pee” project and the selected group was then discarded. Data included for analysis as a part of this study was limited to data that was generated by each three and four year old child that consented to participate in this research and that additionally participated in the “Emotion Tee Pee” project in each of the kinaesthetic, artistic and verbal modes. Final data included:

1. Group time conversations focusing on emotion families and feeling words, which included transcripts in which emotion teepee ribbons were read and discussed
2. Teacher blog postings and observation notes focusing on emotional literacy
3. Artifact collections in which every child participated. This included:
  - a. Self-portrait posed expression photographs
  - b. Hand-drawn feeling word portraits
  - c. Written quotes, as dictated by the children, describing their feeling word portraits

Given the enormity of data produced through the classroom project, I chose to focus only on the yellow emotion family - “calm”, “joyful”, and “ecstatic”. Research agrees that understandings of “happy” are the first to emerge in early childhood. Accordingly, any data that was not related to the feeling words “calm”, “joyful” and “ecstatic” was then discarded.

**Group time conversations.** Group time typically occurred twice per day: in the mornings, the classroom met in three groups with the children grouped by birth year and in the afternoons, the children met all together. Many, but not all, of the group time conversations relating to the emotion tee pee project were transcribed by the teachers and later posted on blogs to share with parents or co-teachers. Conversations about specific feeling words were held

multiple times throughout the course of a week.

**Teacher blog postings and observation notes.** Throughout the day, teachers generated observation notes on the year-long project developing within the classroom as well as transcripts and reflections on a variety of short-term projects and learning conflicts occurring in the classroom. Each classroom teacher has a notebook in which notes are kept; notes of interest to the teachers are posted either on a class blog, which is shared with all families in the school, or on a teacher-only blog, which is used as a platform for shared reflections among the teachers. Teachers also create child “diaries”, which consist of notes and photos of observed moments within the child’s school life. These diaries are completed for each individual child and are shared with the child and their family. As the “Emotion Tee Pee” was an area of focus for documentation, many of these blog postings, diaries, and notes focused on emotional literacy.

**Artifacts.** Using Photobooth on an Apple computer, children were challenged to create self-portraits exemplifying each emotion. In this program, the computer screen operates as a video screen prior to taking the photo, so that children are able to pose as if they were in front of a mirror, adopting the exact pose they want to capture before taking the photo. Working in small groups of two to four children, teachers reminded the children of how they had defined the feeling word. The children then practiced posing in front of the computer, taking photos. The child deemed when the photographic self-portrait was complete; some children took multiple photos before they were satisfied with a particular portrayal of the feeling word. Children worked at this activity until they felt they had portrayed all of the feeling words within one emotion family and children selected the photo they wanted used as a representation of the feeling word. As a consequence, some children selected photographs for each feeling family



taken on the same day; other children selected photos taken over multiple days. In total, 420 photographs were included as data for this study: one photograph per child for each of the 21 feeling words. For the purpose of this study, I only considered photographs for the three “Yellow” family words - calm, happy and ecstatic.

Child artistic renderings were generated in the classroom over the course of a week for each feeling “family”. Working in small groups of four to six, children were challenged to “draw three faces, one that is feeling \_\_\_\_\_, one that is feeling \_\_\_\_\_, and one that is feeling \_\_\_\_\_”. Children were given permanent markers and a selection of face tracers. Face tracers were available in four face “shapes” for children to trace onto their paper, to help provide a frame to draw within and around. This technique is one that is often used in the classroom early in the school year and the children were familiar with it. Not all of the children used face tracers; some children elected to draw faces free form. When their drawing was complete, teachers asked the children if there was anything they wanted to say about the drawing and the feeling word. The teacher printed this information on the back of the paper. For the purpose of this study, I only considered artistic renderings for the three “Yellow” family words - calm, happy and ecstatic.

### **Participant Information**

The data collected for the “Emotion Tee Pee” project by the teachers focused on all the children in the “big classroom” - 29 children aged 30 months to five years: nine four year olds, ten three year olds and ten 30 – 36 month olds. Eight children attended school part time, sharing four full-time equivalent spaces; the remaining twenty-one children attended school full time (five days per week, 7:30 – 5:30). Children all spoke English as their first language.

Initial group selection intended to focus on a group of children who were all born within

one birth year (out of a possible three birth year groupings); however, it became apparent that the oldest two age groupings were working closely together as they co-constructed this project. For example, while drawing portraits, children from both age groups were often placed together in small groups and influenced how the drawings were created. When drawing “vigilant”, one mixed age group of four children discussed how vigilant meant “always watching” and that this required having “eyes in the back of your head”. The “vigilant” drawings produced by this group of children all featured more than two eyes, a stark contrast to the “vigilant” drawings produced by the other children in the school. Consequently, group selection included both the three and four year old groupings (a total of nineteen children), in order to include all observations and artifacts that were gathered together as a part of the “Emotion Tee Pee” project. As such, participants included in this study are the children in the oldest two age groups who consented to participate in this research.

For the purposes of this study, data from the youngest group of children, the two-year-olds, was not considered, as many of the children within the two-year-old group were not yet verbally expressive and did not participate in group time conversations, limiting the data available for analysis. Out of the 19 three-and-four-year old children, two children elected not to participate in this study, leaving 17 children as participants: nine four-year-olds and eight three-year-olds.

**Teachers.** There were three teachers involved in the regular delivery of this curriculum. One teacher, “Mr. Paul”<sup>1</sup>, took the lead in coordinating the delivery of the project, taking responsibility for ensuring all children contributed to the photographic element of the project, for

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<sup>1</sup> Pseudonyms for all teachers and children have been used.

communicating to parents about the program and determining classroom environmental supports for the program. Mr. Paul was additionally responsible for facilitating group time conversations with the four year olds. The second teacher, “Miss Tracey”, was responsible for the explorations with artistic media. The third teacher, “Miss Rachel”, was responsible for facilitating group time conversations with the three year olds (this group included children aged 30 – 35 months who would be turning three years old by December 31st).

All teachers contributed to data collection through notes, transcripts and photographs. All three teachers were relatively new to the field: Miss Tracey had worked in the school for four years, Mr. Paul for three years, and Miss Rachel began working at the school when this project was in its infancy. None of the teachers had any specific training in social-emotional learning; however, the researcher, in my role as pedagogical coordinator, provided resource support in this area as it was requested. This included meeting with the teachers, on average, once per month to discuss the project and review their observations, and discuss other possible ways to explore emotional literacy in the classroom when teachers felt more depth was needed. For example, I provided teachers storybooks that featured specific feeling words to read at group time when teachers requested materials that would support both the Emotion Tee Pee project as well as the classroom literacy program; when teachers asked for photographs to facilitate discussions about what particular feeling words looked like, I provided feeling word photographs from the PATHS program as well as printed photographs taken of the teachers acting out specific emotions. I also provided research articles on SEL to help the teachers position their reflections on the emerging classroom explorations.

## **Data Analysis**

Given the paucity of research exploring the ways preschoolers recognize, label and understand differences in emotional salience, my research employed a grounded theory and a comparative method approach. Palys and Atchison (2008) define grounded theory as “theory that emerges from research” (p. 42). Here, theory “denotes a set of well-developed categories (themes, concepts) that are systematically interrelated through statements of relationship to form a theoretical framework that explains some phenomenon.” (Strauss & Corbin, 2008, p. 55).

Using multimodal data provided an opportunity to study a broader range of children’s understandings than what one data type might otherwise offer (Darbyshire et al, 2005). “Different data sources provide different data as well as additional information on themes and concepts already shared by the participants. Multiple methods are useful as a means of confirmation and as a way to provide information one data-collecting strategy might not have generated.” (Freeman & Mathison, 2009, p. 148). The extensive, multimodal data provided for this study offered an opportunity to recognize and describe patterns in the ways preschoolers recognize, label and understand feeling words of varied salience (referred to hereafter as emotional literacy actions).

To address my research question, I first studied the data from each mode. For the artistic renderings and kinaesthetic poses, I first studied the three images each child created to illustrate the set of feeling words of varied salience. I noted and categorized data that illustrated any change between “calm” and “happy” and any change between “happy” and “ecstatic”. I then conducted an iterative process whereby I amalgamated portions of the data into categories reflecting emerging trends, checked the trends against categories in established literature, and

repeated until all data was coded and the most relevant categories had evidenced themselves. A second researcher coded randomly selected data, to ascertain inter-rater reliability. The coding tool was adjusted accordingly, and data coding was reviewed and adjusted to reflect the final coding tool. From this process, categories of emotional literacy actions for each mode emerged. This data was then annualized to identify any commonalities or trends across gender, age, feeling word salience, and modality.

For each transcribed conversation, I first studied the transcripts, noting and categorizing data that referred to or discussed a feeling word. I again conducted an iterative process whereby I amalgamated portions of the data into categories reflecting emerging trends, checked the trends against categories in established literature, and repeated until all data was coded and the most relevant categories had evidenced themselves. Data was again given to a second researcher to code, to ascertain inter-rater reliability. The coding tool was adjusted accordingly, and data coding was reviewed and adjusted to reflect the final coding tool. The final coding tool had five clear categories for linguistic statements: amount measurement statements, descriptions of bodily sensations or states, statements referencing other feeling words, cause and effect statements, and statements referencing items or people. This data was then analyzed to identify any commonalities or trends across gender, age and feeling word salience.

## **Chapter Four: Findings**

In this chapter, I discuss the research findings, first discussing the mode-specific findings and then considering inter-mode findings. In answering my first research question about the ways that preschoolers use artistic, kinaesthetic and linguistic modes of expression to recognize, label and understand feeling words of varied salience, I report that preschoolers use artistic and kinaesthetic modes of expression to depict how the emotion is physically exhibited or communicated, and this was primarily done by changing at least one specific action move to indicate a change in salience. Further, I report that linguistic modes were used more heavily by females, and primarily to describe experiences, items and relationships that cause the emotional experience. I then present inter-mode findings, reporting that each mode afforded unique emotional literacy actions, and that multi-modal explorations of feeling words of varied salience present a more complex picture of each child's understanding.

### **Mode Specific Findings**

The subsections that follow detail these findings and illustrate the main ideas through a combination of descriptions of the data as well as descriptive statistics of the trends found.

**Mouth and eye depictions in artistic renderings of feeling words.** In analyzing the artistic renderings, I first categorized the general impression given by the rendering of the children's intended image of 'calm' as compared to the intended rendering of 'joyful'. This was then repeated, comparing 'joyful' to 'ecstatic' (Figure 1). Possible categories included: increased emotional salience, decreased emotional salience and no change in salience.



Figure 4. Example of three artistic renderings; three-year-old female

Descriptions were additionally made, noting what specific parts of the drawings were altered to depict the salience change. This was then repeated for every child's set of drawings. Across the seventeen participants, my analysis found that 100% of all renderings of 'calm' and 'joyful' reflected an increase in depicted salience, while 88% of all renderings of 'joyful' and 'ecstatic' reflected an increase in depicted salience. Further, the research suggested a pattern of one primary way and one secondary way that emotional salience was artistically reflected: through altering mouth images and, to a lesser extent, altering eye images. To illustrate how emotional salience changes were depicted, this section will draw on three examples: one of a line mouth change, one of a line-to-open-mouth change and one eye change example.

**Mouth changes.** In drawings of faces showing calm, joyful and ecstatic feelings, the vast majority of children depict mouth changes. The changes between 'calm' versus 'joyful' all appeared to depict an increase in emotional salience; all of the children drew mouth changes between 'joyful' and 'ecstatic'; however, two of these children's mouth changes did not seem consistent with changes that depict an increase in emotional salience.

While the specific types of mouth depictions varied from child to child, when comparing

three images (calm, joyful, ecstatic) generated by the same child, consistent changes emerged. Considering the patterns of mouth changes in all of the children’s artistic renderings, the two trends that emerged were size changes in line mouth or open mouth and switching from line mouth to open mouth (Table 1). The following drawings and descriptions illustrate each of these trends.

Table 1 - Mouth change in comparison of artistic renderings of ‘joyful’ versus ‘ecstatic’

	<b>Calm to Joyful</b>			<b>Joyful to Ecstatic</b>		
	Line mouth in both images (no change in mouth type)	Line mouth to open mouth	Open mouth to open mouth (no change in mouth type)	Line mouth in both images (no change in mouth type)	Line mouth to open mouth	Open mouth to open mouth (no change in mouth type)
3 year old males	1	1	0	1	1	0
3 year old females	3	0	3	1	2	3
4 year old males	4	0	0	1	3	0
4 year old females	2	0	3	1	1	3

Table 1. Mouth change in comparison of artistic renderings of ‘joyful’ versus ‘ecstatic’

*Size changes of line mouth and open mouth.* The first example (Figure 2) illustrates typical line mouth changes, which were made in 59 % of all mouth changes illustrating ‘calm’ to ‘joyful’ and in 24% of all mouth changes for ‘joyful’ to ‘ecstatic’. Comparing ‘calm’ to ‘joyful’ and ‘joyful’ to ‘ecstatic’, line mouth drawings consistently increased in mouth size or curvature to reflect an increase in salience. (Researcher descriptions are in italics.)

*‘Calm’ to ‘Joyful’:* calm’ has a slight upturn to the line mouth, seeming slightly happy or secretive rather than annoyed or frustrated. The line mouth changes to a fully drawn ‘u’ mouth,



and has been drawn as a double line, with either a dimple or a 'mouth top' added. This seems to be a definitive change in emotional salience.

*'Joyful' to 'Ecstatic': the double line mouth seen in 'joyful' has once again become a single line mouth in 'ecstatic'. However, as the mouth size has again dramatically increased, and the curvature appears to be more intense, the mouth change seems to again mark an increase in salience.*



Figure 5. 'Calm', 'Joyful', 'Ecstatic' artistic renderings with larger line mouth smile; three-year-old female

Similarly, size changes in open mouth drawings were made to illustrate changes in emotional salience. The next example (Figure 3) illustrates typical open mouth changes, which were made in 35 % of all mouth changes for 'calm' to 'joyful' and in 35 % of all mouth changes for 'joyful' to 'calm'.

*'Calm' to 'Joyful': 'calm' is a round, open mouth that increases in size as a 'joyful' mouth. The teeth, which are visible in both mouths, also change, as if only one row of teeth is shown in 'calm' and two rows of teeth are shown in 'joyful', perhaps demonstrating a larger and toothier smile.*

*'Joyful' to 'Ecstatic': the round, open mouth has again increased in size, and is filling a large portion of the face in 'ecstatic'. The mouth reaches up to the eyes in this image, and touches both sides of the face, suggesting an increase in smile intensity.*



Figure 6. 'Calm', 'Joyful', 'Ecstatic' artistic renderings; three-year-old female

*Line mouth to open mouth changes.* Transforming a line mouth to an open mouth illustrates the second most common mouth change that children utilized to demonstrate an increase in salience (Figure 4). Looking across all 17 drawings, only 5 % of artistic renderings utilized a line mouth to open mouth change to indicate a change in salience from 'calm' to 'joyful', however, 41 % used a line mouth to open mouth change to indicate a change in salience from 'joyful' to 'ecstatic'.

*'Joyful' has a u-shaped line mouth that turns up, reaching the eyes on both sides of the face. 'Ecstatic' has an open mouth, with some teeth and a tongue visible. The mouth lines are more heavily down turned, but the emphasis with the thick black line on the up curve seem to emphasize a positive emotion. While the 'ecstatic' image doesn't necessarily give an overall impression of an increase in happiness, it does seem to reflect an increase in intensity of emotion, and mouth changes have been made in comparison to the 'joyful' image.*



Figure 7. 'Calm', 'Joyful', 'Ecstatic' artistic renderings; four-year-old female

**Eye changes.** Eye changes were also depicted, with 65% of the children rendering eye changes to indicate salience changes from calm to joyful and 59 % of the children rendering eye changes to indicate salience changes from joyful to ecstatic. Eye changes included changes such as larger eyes and lengthened / increased amount of eyelashes (Figure 5, Figure 6).

*Larger eyes. The eyes in 'calm' and 'joyful' increase in size. Both remain fully shaded, with no differentiation for the iris within the eye. The eyelashes, which are present in the 'calm' image but have little prominence in the left eye, are much more pronounced and have increased in size. The combination of the shaded-in eyes with the eyelashes only on the top of the eye (rather than on both lids) give a very alert and energetic feel to the image.*

*The eyes in 'ecstatic' are much bigger than the eyes in 'joyful', and both remain fully shaded, with no differentiation for the iris. The eyelashes have increased in size and reach to or beyond the eyebrows. The size of the eyes and the sparseness of the long eyelashes in 'ecstatic' increase the sense of energy in the image when compared to the 'joyful' image, creating an almost frenetic feel to the illustration.*



Figure 8. 'Calm', 'Joyful', 'Ecstatic' artistic renderings; three-year-old female

*Change in eyelashes. The eyelashes in 'calm' grow in length in 'joyful', yet there are the same number of eyelashes per eye. Similarly, the lines are slightly thicker in the 'joyful' depiction, and this, combined with a marginally bigger pupil, suggest a development in intensity.*

*The change from 'joyful' to 'ecstatic' is more pronounced. From three eyelashes per eye, there are now seven and eight eyelashes. The pupils remain the same size as in 'joyful'. While small changes overall, there is a reflective change in feel to each drawing as the feeling word salience increases.*



Figure 9. 'Calm', 'Joyful', 'Ecstatic' artistic renderings; three-year-old female

In this section I have shared the first set of findings with respect to the changes made in artistic renderings to depict emotional salience changes. Mouth changes were by far the most prevalent, with changes including increasing the size and curvature of a line mouth and/or open mouth and the transformation of a line mouth to an open mouth. Although less common, eye changes were also used, again with a change in length or number of eyelashes and/or size of eyes depicting a change in salience. Thus it appears that these three and four year old children could readily represent a change in salience, from calm to joyful to ecstatic, in their drawings. With a clearer sense of how children depicted salience changes in artistic renderings, I will now consider the findings on the kinaesthetic poses.

### **Changes in Kinaesthetic Poses of Feeling Words of Varied Intensity**

In this section, I outline the three prevalent action moves that were made to kinaesthetically pose feeling words of varying emotional salience: mouth changes, shoulder changes and hand gestures. These action moves are shared through descriptions and images of

the kinaesthetic poses.

**Mouth changes.** Similar to the children's drawings of feeling words of varied emotional salience, mouth changes were the most prevalent action move in kinaesthetic poses of 'calm' and 'joyful' and 'ecstatic'. In 'calm' to 'joyful', all of the children posed a mouth change consistent with what might be expected to illustrate an increased emotional salience. In comparing poses of 'joyful' to 'ecstatic', all nine of the four year olds and the majority of three year olds posed a mouth change consistent with expected poses of an increased emotional salience (Table 2).

Table 2 - Frequency of kinaesthetic poses

	<b>Calm to Joyful</b>			<b>Joyful to Ecstatic</b>		
	Mouth change consistent with expectations for increase in intensity	No mouth change	Mouth change inconsistent with expectations for increase in intensity	Mouth change consistent with expectations for increase in intensity	No mouth change	Mouth change inconsistent with expectations for increase in intensity
3 year old males	3	0	0	3	0	0
3 year old females	6	0	0	3	0	3
4 year old males	4	0	0	4	0	0
4 year old females	5	0	0	5	0	0

Table 2. Frequency of kinaesthetic poses

Similar to the artistic renderings, a larger smile seems to be associated with a stronger emotional salience; smile changes, such as a 'closed-mouth' smile changing to an 'open-mouth' smile were also used to indicate a stronger emotional salience. The following example illustrates how mouth changes were utilized to depict increasing salience (Figure 7).

*In the poses of ‘calm’ and ‘joyful’, Markus moves from a tightened and slightly neutral mouth to a closed mouth smile.*

*In the poses of ‘joyful’ and ‘ecstatic’, Markus<sup>2</sup>, rather than increasing smile size, opens his mouth. The smile size stays approximately the same; he has essentially maintained his smile and dropped his mouth open, as if he was yelling.*



Figure 10. ‘Calm’, ‘Joyful’ and ‘Ecstatic’ kinaesthetic poses, three-year-old male<sup>3</sup>

**Shoulder moves and hand gestures.** Other action moves that children made to reflect increased emotional salience included shoulder moves and hand gestures (Figure 8, Figure 9). Included in only one artistic rendering, these moves appeared more in the kinaesthetic poses. Shoulder moves, such as shrugging, raising one shoulder, or dropping the shoulders back were all used, but no one shoulder move emerged as a trend. Gestures such as hands placed on the face, placed together near the face, and arms flung outstretched were all used, with outstretched or raised arms being the most commonly used when posing ‘ecstatic’. In total, 35% of the children used shoulder moves or hand gestures to indicate a salience change between ‘calm’ to ‘joyful’; this percentage shifted to 53% when comparing ‘joyful’ to ‘ecstatic’.

The educators working with the children on kinaesthetic posing did not anticipate

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<sup>2</sup> Pseudonyms for all children and teachers have been used.

<sup>3</sup> Participant consent letters included permission for photos with child faces

shoulder and hand gestures, and so the photographic images were focused on the facial posing, and thus limited to the upper body and face. Despite this limitation, it is still possible to see large arm and shoulder movements as well as hand gestures that were made near the child's face. Similarly, the teacher notes written in class during this activity were not looking to document any kinaesthetic moves beyond what was captured on the camera, however, the teacher notes indicated that many poses consisted of movement (for example, ecstatic poses often included jumping before or after the pose) or sounds (for example, calm poses included a deep exhale and a "ahhhh" sound).

These findings seem to resonate with the limited research into multiple cues as emotional identifiers in preschool children (Nelson and Russell, 2011). As young children have been found to primarily rely on facial cues to identify emotion, but to be able to identify emotions to a lesser extent when only body cues are given, body gestures seem to be a part of the feeling word cues that children acquire.

The following examples demonstrate how children used shoulder moves and hand gestures within the photographic image, to kinaesthetically pose feeling words of varied emotional salience.

***Shoulder moves.*** In 'calm', Marissa has relaxed shoulders and has leaned forward slightly, as if she has just exhaled deeply. Her lips are neutral and slightly parted. In 'joyful', she has straightened up with square shoulders. She is smiling an open mouth smile, showing her teeth.

Moving from 'joyful' to 'ecstatic', Marissa has energized her pose. Her arms are flung open and up. She has inhaled, causing her chest to lift, and her shoulders are raised, increasing

*her bodily tension. Her smile is bigger and more open, showing more teeth and pushing her cheeks up.*



*Figure 11. ‘Calm’, ‘Joyful’, ‘Ecstatic’ kinaesthetic posing in which shoulder moves are made; four-year-old female*

***Hand gestures.*** *In calm, Sunshine has kept her shoulders relaxed and lowered. However, in “joyful”, she has moved her hands to her face, in a pose that also brings her shoulders forward. Her hands are folded in each other, with her thumb outlining the bottom of her open mouth smile.*

*When Sunshine poses ‘ecstatic’, her smile changes (but not dramatically), however, her hands and index fingers form two “L” shapes, with her index fingers pushing into and forward on her cheeks. This creates deeper smile lines and emphasizes the size of her open mouth smile.*



*Figure 12. ‘Calm’, ‘Joyful’, ‘Ecstatic’ kinaesthetic posing in which hand gestures are made; three-year-old female*

This section has shared findings with respect to the moves made in kinaesthetic poses depicting emotional salience changes. As found in artistic renderings, mouth changes were by



far the most prevalent, with changes including increasing the size of smile, and switching from a closed mouth smile to an open mouth smile. Not seen in the artistic renderings, shoulder moves and hand gestures were also used in kinaesthetic posing. The next section will share the third and final finding that emerged out of my analysis of the children's discussions.

### **Linguistic Explanations of Feeling Words**

Linguistic explanations of each feeling word were gathered from the transcripts of group time conversations, as well as statements the children made to the teachers when drawing or kinaesthetically posing each feeling word. In analyzing these statements, I began by categorizing each statement made. In linguistic explanations of each feeling word, five types of statements were found: statements of amount measurement, referring to a bodily sensation or state, referring to another feeling word, describing a cause, and referring to an item or person (Table 3).

Table 3 - Linguistic explanation categories

<b>Type of Statement</b>	<b>Explanation</b>	<b>Example</b>
Amount Measure (AM)	Statement using terms that measure size or amount, including the words little, big, some, very, really.	"Calm is <i>a little bit</i> happy." – 4 yr old female
Bodily State (BS)	A statement referring to a bodily sensation or state.	" <i>When you cry</i> because you're really happy." – 4 year old female
Feeling Word (FW)	A reference to a feeling word other than the one being discussed.	"Joyful means <i>very happy</i> ." – 4 yr old female

Table 3 - Linguistic explanation categories

Type of Statement	Explanation	Example
If/When (IW)	Using statements describing a cause that may generate an experience of the feeling word, such as when or if statements.	<i>“When I go to sleep by myself, because I like sleeping by myself.”</i> – 3 yr old male
Item/Person (IP)	A statement which makes a reference to an item or person.	<i>“My blanket and my kitty help me calm down.”</i> – 4 yr old female

Table 3. Linguistic statement categories

If/When statements were the most commonly used statements, with 48 % of all statements falling under this category. Amount measure statements were the second most common, with 19 % of all statements.

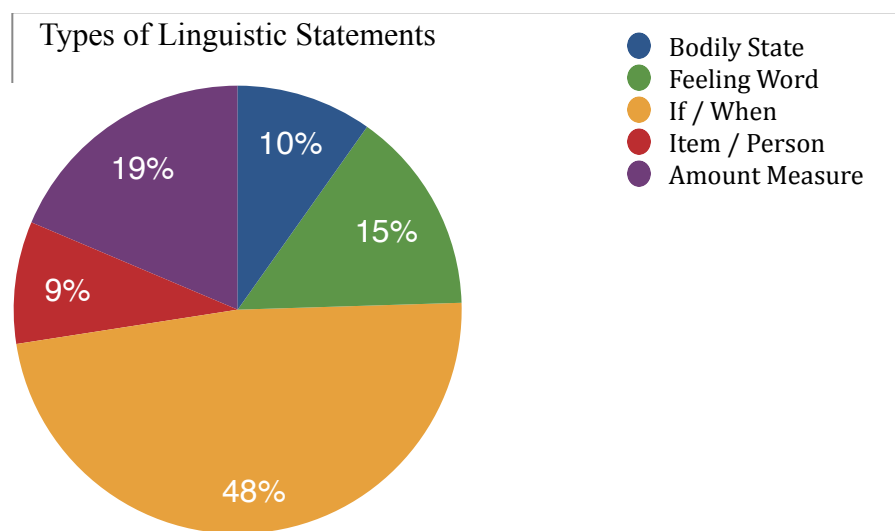


Figure 13. Type of linguistic statements made

Table 4 - Multiple Category Statements

	Calm				Joyful				Ecstatic			
	AM & FW	AM & BS	FW & IW	BS & IW	AM & FW	AM & BS	FW & IW	BS & IW	AM & FW	AM & BS	FW & IW	BS & IW
3 year old males	1	0	0	0	1	0	0	0	1	0	0	1
3 year old females	2	0	0	3	3	0	0	0	2	0	1	3
4 year old males	0	1	1	2	2	0	0	0	3	0	1	0
4 year old females	0	0	0	1	3	0	0	0	4	0	1	0

Table 4. Multiple category statements

37 statements could fall under multiple categories and were thus coded multiple times.

The multiple category statements were limited to combinations of: amount measure and feeling word; amount measure and bodily state; feeling word and if/when; or bodily state and if/when (Table 4).

In group time conversations, it appears that the children's statements build on each other, co-constructing an understanding of what each feeling word means. This happened with statements that references items or people and with when/if statements. For example, the snippet of conversation below shows how these three year old girls are reflecting their own experiences while building off of each other's contributions to the dialogue.

*Esther - Starbucks.*

*Sarah - Birthday presents. And treats.*

*Kate - Eating treats.*

*Sarah - Cupcakes. And chocolate.*

*Christine - Chocolate at Starbucks.*

Females made significantly more statements (67) when compared to males (40). Four year olds (male and female) and three year old females used more types of statements than three year old males. Not all children made linguistic statements about each feeling word. One three year old male and three three year old females made only one linguistic statement; one three year old girl made only two linguistic statements and one four year old boy made only two linguistic statements. All other children made at least one statement for each feeling word (Table 5).

Table 5 - Amount of linguistic statements per child

	one or more statement per each feeling word	one statement per feeling word	one statement per feeling word for two feeling words	one statement for one feeling word
3 year old males	1	0	0	1
3 year old females	2	0	1	3
4 year old males	3	0	1	0
4 year old females	4	0	0	0

Table 5. Amount of linguistic statements per child

Unlike the artistic renderings and kinaesthetic posing, the linguistic statements present a difficulty in determining how children are able to understand feeling words of increasing salience. The explicitness of the amount measurement and feeling word statements provide a relatively clear picture. For example, Christine (four year old female) used amount measurement and feeling word statements for each of ‘calm’, ‘joyful’ and ‘ecstatic’:

*“Calm is a little bit happy.”*

*“Joyful means very happy.”*

*“Ecstatic is very, very, very, very happy.”*

In this example, it is easy to understand how Christine makes sense of an increasing

emotional salience: calm, joyful and ecstatic are all seen as varying amounts of happy. Similarly, when Connor (three year old male) states, “Joyful is happy”, the synonym is accurate and effective in communicating how Connor understands joyful in terms of emotional salience.

Bodily state statements seem equally clear. For example, Thomas (four year old male) states, “I feel calm when I take a deep breath”. Autumn (three year old female) states, “My head is calm when I sleep”. Both of these statements refer to a bodily state (deep breathing, sleeping) that can be generally understood and interpreted as a particular salience.

Two categories - If/When and Item/Person - seem to be contextual or relational, thus making it difficult to interpret in terms of emotional salience understanding. For example, Johnny (4 year old male) used if/when statements for each of ‘calm’, ‘joyful’ and ‘ecstatic’:

*“When Mommy and Daddy rub my back.”*

*“I was joy when I come to school today.”*

*“When I see Marissa.”*

Without having more information about Johnny’s relationships, the context of the situations described, and even knowing Johnny’s likes and dislikes, it is difficult to accurately interpret Johnny’s understanding of emotional salience as related to if/when situations. Arriving at school may be a joyful experience for Johnny, but it may also be an ecstatic one. In this statement, he situates arriving at school “today” as joyful, but without knowing Johnny’s regular experience at school (for example, is it typically a joyful experience?) or knowing what may have happened today in particular to make it a joyful experience, it is hard to determine if he is using the feeling word accurately. Similarly, seeing Marissa may lead to joyful feelings if it is a friendly relationship, however, if Marissa and Johnny are best friends, or share a particular

passion for something in the classroom at the moment, this could indeed be an ecstatic feeling. As 57 % of all linguistic statements were if/when or item/person statements, it is difficult to determine if the feeling words are being used accurately, in terms of describing emotional salience.

In summary, I found that children make five types of statements when describing feeling words of increasing emotional salience. Further, females offered more linguistic statements than males. Due to the personalized nature of so many of the linguistic statements, children's understanding of emotional salience is less apparent to an observer when considering only a linguistic mode of communication.

### Inter-mode Findings

The previous findings have focused primarily on mode-specific findings. In this section, I address my second research question, which wondered if artistic, kinaesthetic and linguistic explorations of feeling words facilitate mode-specific ways of recognizing, labeling and understanding feeling words of varied salience.

Table 6 - Summary of overall impressions, artistic and kinaesthetic

	Artistic Rendering				Kinaesthetic Rendering			
	Calm - Joyful		Joyful - Ecstatic		Calm - Joyful		Joyful - Ecstatic	
	Increase in salience	Decrease or no change in salience	Increase in salience	Decrease or no change in salience	Increase in salience	Decrease or no change in salience	Increase in salience	Decrease or no change in salience
3 year old males	2	0	1	1	2	0	2	0

Table 6 - Summary of overall impressions, artistic and kinaesthetic

	Artistic Rendering				Kinaesthetic Rendering			
	Calm - Joyful		Joyful - Ecstatic		Calm - Joyful		Joyful - Ecstatic	
3 year old females	6	0	5	1	6	0	4	2
4 year old males	4	0	4	0	4	0	3	1
4 year old females	5	0	5	0	5	0	5	0

Table 6. Summary of overall impression, artistic and kinaesthetic

**Artistic renderings versus kinaesthetic poses.** When considering the artistic mode and the kinaesthetic mode, the majority of expressions reflect an increasing emotional salience (Table 6). All of the children depicted an increase in salience in both modes, when shifting from calm to joyful. When shifting from joyful to ecstatic, the majority of the children (i.e. all four year olds and most three year olds) depicted an increase in salience in artistic (88%) and kinaesthetic renderings (82%).

**Children's success with expressing salience using two non-linguistic modes.** When considering only one mode, children may not have been able to communicate an understanding of increasing salience. However, when both artistic and kinaesthetic modes are considered, 100 percent of children were able to depict increasing salience from calm to joyful, and joyful to ecstatic. The children who were unable to demonstrate an increase in salience kinaesthetically were able to demonstrate an increase in salience through artistic renderings.

Kate (three year old female) illustrates how, while unable to kinaesthetically reflect an increase in salience between “joyful” and “ecstatic” (Figure 11), she is able to demonstrate an

understanding of this increased salience through her artistic renderings (Figure 12).



Figure 14. 'Calm', 'Joyful', 'Ecstatic' kinaesthetic posing; three-year-old female

*In “calm”, Kate has made a hand gesture to cover her mouth, and her shoulders are not relaxed. Her eyebrows are slightly raised. In “joyful”, her eyebrows remain slightly raised, but her eyes appear to have widened. Her smile is now shown – a moderate, open-mouth smile. Shifting from “joyful” to “ecstatic”, Kate makes a small, tight smile, which suggests a decrease in emotional salience. She has tucked her chin in, and narrowed her eyes. While the pose from “joyful” to “ecstatic” has changed the emotion communicated, it does not necessary reflect an emotion that is an increased salience from “joyful”.*

In Kate's kinaesthetic poses, while there is an increase in emotional salience from “calm” to “joyful”, there does not seem to be a similar increase from “joyful” to “ecstatic”. It is unclear, if considering only a kinaesthetic mode of expression, if Kate understands the difference between “joyful” and “ecstatic”, in terms of emotional salience. However, when her artistic renderings are also considered, there is a clear depiction of an increase in emotional salience from “joyful” to “ecstatic”. In her artistic renderings Kate shows a mouth change that appears to reflect a more intense experience of the emotion when moving from ‘joyful’ to ‘ecstatic’.



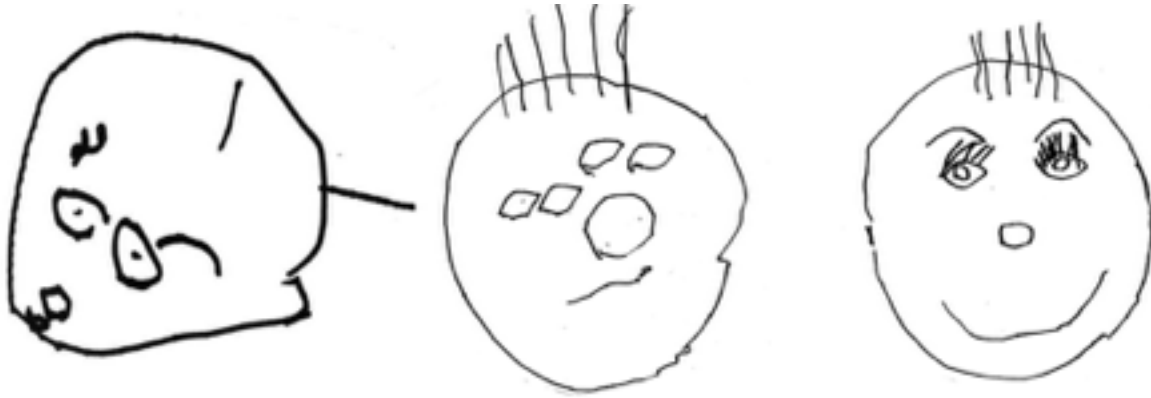


Figure 15. 'Calm', 'Joyful', 'Ecstatic' artistic rendering; three-year-old female

*In her "calm" illustration, Kate has drawn a small mouth. The eyes are wide and open. Shifting to "joyful", the mouth has increased in size and has an upturned side. The number of eyes has increased, although they are smaller in size than the "calm" image.*

*Comparing "joyful" to "ecstatic", the "ecstatic" mouth has again increased in size and now has a more dramatic upturn on both sides. The eyes have returned to two eyes, rather than four, and are now much more intense, with iris, eyelashes and eyebrows added in.*

**Linguistic statements add information beyond what non-linguistic modes.** Linguistic statements offered a unique insight into the understanding of feeling words. As discussed earlier, the majority of the linguistic statements did not necessarily seem to reflect the increasing salience of the emotion. Rather than a mode to define or represent the feeling word, linguistic statements seem to describe surrounding experiences and relationships associated with the emotion.

Samantha illustrates this through her statements about calm, joyful and ecstatic.

*Calm - You're calm and really enjoying a story!*

*Joyful - Like going to a friend's house for dinner.*

*Ecstatic - When Santa brings presents.*

She uses experiences to illustrate the feeling word, such as “when Santa brings presents”. She seems to indicate an understanding that emotional experiences are fluid and temporary, affected by external interactions. For instances, “When Daddy says “it’s ok” when I am crying” implies an understanding that crying is not calm, and that Daddy can do something to help Samantha regulate the crying feeling, calming herself.

It appears that linguistic explorations of feeling words facilitate a mode-specific way of recognizing and understanding feeling words that is not evident in artistic and kinaesthetic renderings. Through linguistic explorations, children begin to link the internal and physical experience of the feeling word to the context, the relationships and the actions that surround it. 28% of linguistic statements refer to amount measures or bodily experiences, which primarily supports what was already demonstrated through the kinaesthetic and artistic modes; all of the remaining statements offer new information that was not evident in the artistic renderings and kinaesthetic poses. The linguistic statements suggest that some children are able to not only understand the physical changes that occur in the shift between feeling words of varied salience, but that they can additionally understand and begin to explain external causes of these shifts.

### **Summary of Findings**

In this chapter, I presented the findings of this study, as they related to the research questions. I report that children demonstrate mode-specific strategies when representing feeling words of varied emotional salience. Specifically, children use artistic renderings to recognize and label feeling words of varied salience by representing changes in mouth and eye features. Kinaesthetic posing not only demonstrated the use of mouth action moves, but expanded to

include shoulder and hand gestures. Teacher comments indicate that children also use vocal sounds and physical movement to kinaesthetically demonstrate feeling words of varied salience, but this data was not captured outside of casual teacher observations. While linguistic statements are used in five different ways to label, recognize and understand feeling words of varied salience, linguistic statements presented limitations in understanding and not all children used linguistic statements to explore all the feeling words. The mode-specific understandings that emerged suggest that multi-modal explorations of feeling words of varied salience supported all children in expressing, through at least one mode, an accurate representation of how salience increases between feeling “calm” and “joyful”, and “joyful” and “ecstatic”.

In the following discussion chapter, I will synthesize how the findings address my research questions. I will also explore the possibilities for research and education that emerge from this study.

## **Chapter Five: Discussion**

This study explores emotional literacy within an early childhood classroom, considering the ways in which preschoolers use multi-modal expression to recognize, label and understand feeling words of varied salience. It further seeks to understand the mode-specific ways in which each of the three modes - artistic, kinaesthetic and linguistic - facilitate recognizing, labeling and understanding feeling words of varied salience. In this chapter, I will weave together the findings from the previous chapter with concepts found in the literature. Finally, I suggest implications of this study to early childhood education (ECE) as well as research in ECE.

### **Responses to Research Questions**

The initial motivation for this study was found in a desire to consider how to best support emotional literacy within the classroom. Researchers have posited that early education environments are rich in opportunities for social and emotional conflict, and can provide a context for educators to support children in developing emotional literacy. Yet, despite the interest in social-emotional learning, there is a little research in early childhood emotional literacy, and there is no research currently exploring how children may understand or explore feeling words of varied salience. As understanding varied salience is a key in emotional literacy, this, I argue, is a potential starting point for both researchers and educators interested in emotional literacy in early childhood education. What meanings, if any, do young children give to emotions of difference salience, and how can others - adults and peers - understand these meanings?

The first question, *In what ways do preschoolers use artistic, kinaesthetic and linguistic modes of expression to recognize, label and understand feeling words of varied salience within a*

*classroom environment?*, sought to examine the ways that children used mode-specific approaches to explore feeling words of varied salience. The second question, *In what ways do multi-modal explorations of feeling words facilitate ways of recognizing, labeling and understanding feeling words?*, investigated how children's multi-modal work supported explorations in emotional literacy. In the following sections, I answer each research question and discuss the contributions this study adds to current research.

**Response to the first question.** This study found that children recognized, labelled and understood feeling words of varied emotional salience in a myriad of ways, yet clear trends in the ways each mode was used by the children emerged. Artistic modes demonstrated that children emphasized eye and mouth action moves as a way of communicating changes in salience. Kinaesthetic modes showed that, in addition to using eye and mouth action moves, children also used hands and gestures as a way of expressing changes in emotional salience. There was also a suggestion that vocalizations outside of language, such as screams, grunts, laughs and shouts, were used by some children as each feeling word was kinaesthetically posed. Linguistic modes offered insights into the cause and effect of feelings of difference salience and through using synonyms and linguistic measurements, children demonstrated ways of categorizing/grouping and labelling feeling words of varied salience.

Research using multi-modal techniques in emotional literacy with young children is scarce. However, this study does support the available literature. Children have been found to have a clear ability to recognize 'happy' (Denham & Couchoud, 1990; Denham, 1998; Camras & Fatani, 2008; Tarpey, 2010); the ability to kinaesthetically pose 'happy' has also been found (Lewis, Sullivan & Vasen, 1987; Gosselin et al., 2011). This study adds to the existing literature,

positing that children are able to use multiple modes to illustrate 'joyful' - a synonym of 'happy' - as well as the corresponding high salience and low salience feeling words within the joyful emotion family.

Generally, emotional labelling and recognition in children has been explored through comparing emotional categories. Widen and Russell's Differentiation Model (2008) suggests that child categorization of emotion starts broad and then narrow, and existing research has established that there is a breadth to the emotional categories that are understood by preschool children. While further research is clearly needed into when children develop an understanding of emotional depth and how this understanding is expressed and categorized, this study clearly demonstrates that children additionally are able to recognize, label and understand emotional depth within an already understood emotional category.

**Response to the second question.** This study presented three modes of exploring emotional literacy in the classroom - artistic, kinaesthetic and linguistic. This holistic and multi-modal approach revealed that young children's emotional understandings is far more expansive than one would know if looking at only one mode of expression. Each mode offered specific and unique insights into how children recognize, label and understand the feeling words 'calm', 'joyful' and 'ecstatic'. Further, not all children were able to use all modes to express all three feeling words accurately. What seems crucially important is that when limiting considerations to only a linguistic mode, not all children were able to communicate an understanding of each feeling word, and the majority of linguistic statements did not clearly demonstrate a grasp on the differing salience of each feeling word. Hence, researchers and educators may translate this finding to add to the existing body of knowledge that, when researching or educating young

children, it is vital to utilize multiple modes of expression. The richness that grows from multiple modes of communication, which in the current study were part of the classroom experience, can not be underestimated. Therefore, it is recommended, if children do not initially offer more than one mode of communication, researchers or educators may create opportunities for children to communicate through multiple modes. Each mode may offer an additional piece of knowledge that a child may hold, enhancing the accuracy of the adult's understanding of the child's knowledge.

Previous research has posited that, when considering young children's meaning making and learning, multimodal approaches provide a more comprehensive insight into social and individual understandings. (Kress and Van Leeuwen, 2006). This study suggests that Kress and Jewitt's argument (2003) for a multimodal approach to literacy appears to be equally robust when applied to emotional literacy. While children may not be able to accurately express their understanding of feeling words of varied salience through only one mode, combining all three modes enables each child to demonstrate that they do, indeed, understand the concept. This suggests that while three and four year olds understand variations in salience within an emotion family, multiple modes of communication are necessary if all children are to be able to accurately communicate their understandings.

### **Limitations of This Study**

Interpretations of my findings should be done with caution as this was a relatively small subject of field, with only one preschool classroom studied. A breadth of factors that influence preschooler emotional literacy were not examined in this study, including home-school connections and parental influence (Rivers et al, 2013). This study does not dispute the import

of such factors, but has instead chosen to focus only on children's understanding of each feeling word.

Further, the limitations and parameters set by the teachers with each mode may have contributed to the scope of the children's drawings, poses and statements. When asked to draw a portrait, children may have deemed this to be limited to face-only, thus explaining the minimal artistic renderings of bodies. Similarly, the focus of the photographs was on face-only, and video clips would have captured the casual teacher-reported data of utterances as well as the body gestures that occurred. It is unclear the extent to which the resulting artifacts children created were influenced by the parameters set by the task given and the materials offered.

Finally, this classroom was one with a curricular focus on social-emotional learning, and as such, the children had been exposed to a wide range of feeling words throughout their time at the centre - which, for some children, had been three years. The findings from this research should not be over-generalized, but simply serve as a further contribution to the field of emotional literacy in early education.

### **Implications of This Study**

The following subsections discuss the implications of this study. First, I suggest some implications for educators in ECE and then continue on to offer some implications for researchers.

#### **Implications for educators.**

*Social-emotional learning and varied emotional salience.* This research has the potential to inform social emotional education within the preschool classroom. While limited, the study demonstrates that preschool children are able to, in various ways, understand,



recognize and label varied emotional salience of feeling words that would fall within the “happy” emotion family. Currently, early education social-emotional literacy programs do not address varied emotional salience. There are a variety of programs used in early education settings such as Promoting Alternative Thinking Strategies (PATHS), MindUp, Second Step, and Tools of the Mind. While these programs teach a variety of skills, the introduction of feeling words is limited in number, only a small variety of emotional valence is introduced, and it does not introduce the idea of emotional salience. It is possible that such restricted programs may limit emotional literacy education, flattening the complexity found in varied salience and reducing a taught emotional state to simply one feeling word, one salience. Emotions are complex and there are a myriad of feeling words that label and express the varied salience within each emotional experience. “A sophisticated feelings vocabulary contributes to the development of emotional literacy and helps students become aware of their own and others’ emotions, communicate emotions effectively, understand the causes and consequences of their emotions, and enhance their ability to regulate emotions and their behaviour.” (Brackett et al., 2011, p. 15). For children to accurately recognize and label a particular feeling, understandings of varied salience are a necessary part of a feeling word vocabulary, providing an important piece of knowledge for emotional regulation.

The RULER approach (Brackett et al., 2011) is a program that attempts to address this gap in education, systematically introducing feeling words within an emotion family, and plotting words on a mood meter, to demonstrate both valence and salience. However, this program is currently limited to elementary and secondary schools, with only a limited pilot preschool RULER program in process.

This study clearly shows the capabilities of children within this area and suggests that this is at least one piece missing from current social-emotional education programs in early education.

***Multi-modal social-emotional education in the preschool classroom.*** The possibilities found in multi-modal education experiences have been suggested in numerous studies, however the importance of multi-modal education, particularly as it relates to social-emotional learning, with young children has not been emphasized. Tomalley and McClellan (2013) suggest that specific elements of group time activities will better engage young children, such as music, movement and games. Rivers et al (2013), report that, after year one in their pilot study of the RULER program for preschools, using multiple sensory modalities is vital within a preschool emotional literacy program.

This study supports the limited literature available, demonstrating the importance of multi-modal experiences in the classroom. For educators to accurately assess what young children know, opportunities for multi-modal expression appear to be required. Without each of the three modalities used in this study, the children's understandings of feeling words of varied salience would be incomplete, and an inaccurate representation of what children know. Without having an accurate understanding of what children know, it reasons to be impossible to have a truly developmentally appropriate practice. Reggio-inspired teaching practice posits that a classroom supporting 'the one hundred languages' of children is vital in terms of respecting the myriad of ways that children learn (Edwards et al., 1998). This appears to hold true when considering emotional literacy in the classroom. While this study only looked at three modes, it is possible that the addition of more modes may show an even deeper understanding of feeling

words; similarly, teaching strategies that utilize multiple modalities may prove to be more effective in supporting learning in the classroom.

### **Implications for research.**

*Naturalistic data collection in early learning settings.* This study did not set out to address data collection methods for researchers; however, in data collection and analysis, it became apparent that there is a growing opportunity for researchers in terms of data availability, within education environments using documentation as a part of their teaching practice. Within this particular environment, teachers carefully collected and organized a significant amount of data in the form of photos, drawings and transcripts. Further reflective notes were also generated by the teachers, as they worked on their in-class documentation as a part of the ‘Emotion Tee Pee’ project. As reflective practice and documentation, such as pedagogical narration and learning stories, gains acceptance and wider use in early education, this may serve as a rich resource for researchers.

*Research in emotional salience understanding.* While literature agrees that preschool aged children typically have mastered understanding of “happy”, this study suggests that children can understand and additionally identify nuances of feeling words that may fall within the “happy” emotion spectrum. Further research to accurately identify the spectrum of emotion families and the corresponding spectrum of feeling words of various salience that a preschooler can acquire is needed, in order to guide best practice for emotional literacy programs and to support children in developing emotional literacy. Without an understanding of what very young children know, emotional literacy education programs run the risk of underestimating children’s emotional literacy and under-supporting potential learning.

***Research into multi-modal approaches.*** Further studies examining the effectiveness of emotional literacy teaching methods are also required. This study suggests that multi-modal approaches are necessary strategies to introduce an emotionally rich vocabulary to early education classrooms, however, was limited to only three modes and only one emotion family. Rivers et al. (2006) found that, in adults, the emotions ‘sad’ and ‘angry’ resulted in different approaches to regulation, suggesting that different emotion families are, simply put, different from each other. It is unclear the extent of these differences. Given that different emotions require different regulation approaches, one could wonder that different modalities may equally be more useful with particular emotions or saliences, in terms of effective recognition, understanding and expression. This raises more questions, such as do feeling words such as rage or grief lend themselves better to particular modalities? There is room for other research to pick up where this study ends, considering the effectiveness of multi-modal learning in emotional literacy and within each varied emotion family, through in a wide range of modes beyond the three explored here.

## References

- Arendt, H. (1977). *Between past and future: Eight Exercises in political thought*.  
London, UK: Penguin Books.
- Ashdown, D., Bernard, M. (2012) . Can explicit instruction in social and emotional learning skills benefit the emotional development, well-being and academic achievement of young children. *Early Childhood Education Journal*, 39, 397-405.
- Barker, J., Weller, S. (2003) . Is it fun? Developing children centred research methods. *International Journal of Sociology and Social Policy*, 23, 33 – 58.
- Biesta, G. (2007). Education and the democratic person: Towards a political conception of democratic education. *The Teachers College Record*, 109, 740-769.
- Bosacki, S. L., Moore, C. (2004) . Preschoolers' understanding of simple and complex emotions: links with gender and language. *Sex Roles*, 50, 659-675.
- Brackett, M. A., & Rivers, S. E. (2014). Transforming students' lives with social and emotional learning. *International Handbook of emotions in education*, 368-388.
- Brackett, M. A., & Kremenitzer, J. P. (2011) *Creating emotionally literate classrooms: An introduction to the RULER approach to social emotional learning*. New York, NY: National Professional Resources Inc./Dude Publishing
- Brackett, M. A., Rivers, S. E., Reyes, M. R., & Salovey, P. (2012) . Enhancing academic performance and social and emotional competence with the RULER feeling words curriculum. *Learning and Individual Differences*, 22, 218-224. Doi:10.1016/j.lindif.2010.10.002
- Brackett, M.A. & Mayer, J.D. (2003) . Convergent, discrimination and incremental validity of

- competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29, 1147 – 1158.
- Brackett, M.A., Rivers, S.E., & Salovey, P. (2011) . Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, 5, 88-103.
- Bruner, J. S. (1957). *Going beyond the information given*. New York: Norton.
- Camras, L. A., & Fatani, S. S. (2008) . The development of facial expressions: Current perspectives on infant emotions. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of Emotions, third edition*. (pp. 291-303). New York, NY: The Guilford Press.
- Capello, M. (2005) . Photo interviews: eliciting data through conversations with children. *Field Methods*. 17, 170 – 182.
- Coady, M. (2008). Beings and becomings: Historical and philosophical considerations of the child as citizen. In G. MacNaughton, P. Hughes, & K. Smith (Eds.), *Young children as active citizens: principles, policies and pedagogies* (pp. 2 - 14). London, UK: Cambridge Scholars Printing.
- Christenson, S. L., & Harvey, L. H. (2004). Family-school-peer relationships: Significance for social–emotional and academic learning. In J. E. Zins, R. P. Weissberg, M. C. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 59–75). New York, NY: Teachers College Press.
- Clark, A. (2005) . Talking and listening to children. In Dudek, M. (Ed.) *Children's Spaces* (pp.1 - 13). Burlington, MA: Architectural Press.

- Clark, A. (2004) . The Mosaic approach and research with young children. In Lewis, V., Kellet, M., Robinson, C., Fraser, S. & Ding, S. (Eds) *The reality of research with children and young people* (pp. 142 - 161). Thousand Oaks, CA: Sage publications
- Clark, A. (2010). *Transforming children's spaces: Children's and adults' participation in designing learning environments*. New York, NY: Routledge.
- Coady, M. (2008) . Beings and becomings: historical and philosophical considerations of the child as citizen. In G. Mac Naughton, P. Hughes, & K. Smith (Eds.), *Young Children as Active Citizens: Principles, Policies and Pedagogies* (pp. 2 - 14). Cambridge, MA: Cambridge Scholars Printing.
- Dahlberg, G., & Moss, P. (2004). *Ethics and politics in early childhood education*. New York, NY: Routledge.
- Dahlberg, G., Moss, P., & Pence, A. (2005) . The preschool as a site for democracy. In G. Dahlberg, & P. Moss (Eds.), *Ethics and politics in early childhood education*. New York, NY: RoutledgeFalmer.
- Damasio, A. R. (1994) . *Descartes' error: emotion, reason and the human brain*. New York, NY: Grosset/Putnam.
- Darbyshire, P., MacDougall, C., & Schiller, W. (2005) . Multiple methods in qualitative research with children: More insight or just more? *Qualitative Research*, 5, 417 – 436.
- Denham, S. A., & Couchoud, E. A. (1990a) . Young preschoolers' ability to identify emotions in equivocal situations. *Child Study Journal*, 20, 193-202.
- Denham, S. A., & Couchoud, E. A. (1990b) . Young preschoolers' understanding of emotions. *Child Study Journal*, 20, 171-192.

- Denham, S. (1998) . *Emotional development in young children*. New York, NY: Guilford Press.
- Denham , S. A., Kochanoff , A. (2002) . “Why is she crying?”: Children’s understanding of emotion from preschool to preadolescence. In L. F. Barrett & P. Salovey (Eds.), *The wisdom in feeling: psychological processes in emotional intelligence* (pp. 239-270). New York, NY: Guilford Press.
- Denham, S. A., & Weissberg, R. P. (2004) . Social-emotional learning in early childhood: What we know and where to go from here. In E. Chesebrough, P. King, T. P. Gullotta, & M. Bloom (Eds.), *A blueprint for the promotion of prosocial behavior*; In Early Childhood (pp. 13-50). New York, NY: Kluwer Academic/ Plenum Publishers.
- Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it?. *Early education and development*, 17, 57-89.
- Denham, S. A. (2006) . Emotional competence in preschoolers: Implications for social functioning. In J. Luby (Ed.), *Handbook of preschool mental health: development, disorders and treatment* (pp. 23-44). New York, NY: Guilford Press.
- Denham, S. A., Bassett, H. H., & Wyatt, T. (2007). The socialization of emotional competence. *Handbook of socialization: Theory and research*, 614-637.
- Denham, S. A., Bassett, H. H., & Wyatt, T. (2007) . The socialization of emotional competence. In J. Grusec & P. Hastings (Eds.), *The handbook of socialization* (pp. 614-637). New York, NY: Guilford Press.
- Denham, S. A. (2007) . Dealing with feelings: How children negotiate the worlds of emotions and social relationships. *Cognitie Creier Comportament*, 11. 1-48.



- Denham, S. A., Warren, H. K., von Salisch, M., Benga, O., Chin, J-C., & Geangu, E. (2011). Emotions and peer relationships. In C. Hart & P. K. Smith (Eds.), *Wiley/Blackwell Handbook of Childhood Social Development* (2<sup>nd</sup> edition) (pp. 413-433). New York, NY: Blackwell Publishers.
- Dockett, S., & Perry, B. (2005). 'You Need to Know How to Play Safe': children's experiences of starting school. *Contemporary Issues in Early Childhood*, 6, 4-18.
- Durlak, J., Weissberg, R., Pachan, M. (2010). A Meta-Analysis of After-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45, 294 – 309.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development*, 82, 405-432.
- Edwards, C., Gandini, L., Foreman, G. (eds) (1998). *The One Hundred Languages Of Children: The Reggio Emilia Approach To Early Childhood Education* (2<sup>nd</sup> edition). Norwood, NJ: Ablex
- Einarsdottir, J., Dockett, S. & Perry, B. (2009). Making meaning: children's perspectives expressed through drawings. *Early Child Development and Care*. 179, 217 – 232.
- Eisenberg, N., Sadovsky, A., Spinrad, T. (2005). Associations of emotion-related regulation with language skills, emotion knowledge and academic outcomes. *New Directions in Child and Adolescent Development*. 109 – 118.
- Ekman, P. (1973). Cross-cultural studies of facial expression, in Ekman, P. (Ed.) *Darwin and Facial Expression*. (pp 169-222). London, UK: Academic Press Inc.

- Ekman, P., Friesen, Wallace V., O'Sullivan, M., Chan, A., Diacoyanni-Tarlatzis, I., Heider, K., Krause, R., LeCompte, W. A., Pitcairn, T., Ricci-Bitti, P. E., Scherer, K., Tomita, M., Tzavaras, A. (1987). Universals and cultural differences in the judgments of facial expressions of emotion. *Journal of Personality and Social Psychology*, 53, 712-717.
- Ekman, P. (2003). *Emotions Revealed : Recognizing Faces And Feelings To Improve Communication And Emotional Life*. New York, NY: Times Books.
- Elias, M. J. (2004). Strategies to infuse social and emotional learning into academics. In Zins, J. E., Weissberg, J. E., Wang, M. C., Walberg, H. J. (Eds). *Building academic success on social and emotional learning: What does the research say?* New York, NY: Teachers College Press.
- Feldman Barrett, L., Lindquist, K. A., & Gendron, M. (2007). Language as context for the perception of emotion. *TRENDS in Cognitive Science*. 11, 327-332.
- Figuerola-Sanchez, M. (2008). Emotional Literacy: Groundwork to Early Learning. *Childhood Education*, 84, 301 – 304
- Freeman, M. & Mathison, S. (2009). *Researching Children's Experiences*. New York, NY: Guilford Press
- Gauntlett, D. (2005). Using creative visual research methods to understand media audiences. *MedienPadagogik*, 4. Retrieved September, 2014 from [www.medienpaed.com/04-1/gauntlett04-1.pdf](http://www.medienpaed.com/04-1/gauntlett04-1.pdf)
- Gosselin, P., Maassarain, R., Younger, A., Perron, M. (2011). Children's Deliberate Control of Facial Action Units Involved in Sad and Happy Expressions. *Journal of Nonverbal*

- Behaviour*, 35, 225-242.
- Harper, D. (1998) An argument for visual sociology. In Prosser, J. (Ed.) *Image-Based Research: A Sourcebook For Qualitative Researchers*. London, UK: Falmer Press
- Harris, P., Olthof, T., Terwogt, M., Hardman, C. (1987). Children's knowledge of the situations that provoke emotion. *International Journal of Behaviour Development*, 10, 319 – 343.
- Hawkins, J. D., Smith, B. H., & Catalano, R. F. (2004). Social development and social and emotional learning. In Zins, J. E., Weissberg, J. E., Wang, M. C., Walberg, H. J. (Eds). *Building academic success on social and emotional learning: What does the research say?* (pp. 135-150). New York, NY: Teachers College Press.
- Heckman, J. J., & Masterov, D. V. (2007). The productivity argument for investing in young children. *Applied Economic Perspectives and Policy*, 29, 446-493.
- Hopperstad, M. (2010). Studying meaning in children's drawings. *Journal of Early Childhood Literacy*, 10, 430 – 452.
- Izard, C. E. (1991). *The Psychology Of Emotions*. New York, NY: Plenum Press
- Izard, C. E., Trentacosta, C.J., King, K. A. & Mostow, A. J. (2004) An emotion-based prevention program for head start children, *Early Education & Development*, 15, 407-422.
- Kendrick, M., McKay, R. (2004). Drawings as an alternative way of understanding young children's constructions of literacy. *Journal of Early Childhood Literacy*, 4, 109 – 128.  
DOI: 10.1177/1468798404041458
- Kendrick, M. & McKay, R. 2009. Researching literacy with young children's drawings. *Making Meaning: Educating the young child*, 2 (1) 53-70. DOI: 10.1007/978-0-387-87539-2\_4

- Kress, G. & Van Leeuwen, T. (2006). *The Grammar of Visual Design*. Routledge, New York.
- Lewis, M., Sullivan, M. W., & Vasen, A. (1987). Making faces: Age and emotion differences in the posing of emotional expressions. *Developmental Psychology*, 23, 690.
- Lewis M. (2011a). Emotions – synthesis. In: Tremblay R.E., Boivin M., Peters R., (Eds.) *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development. Retrieved September 2014, from:  
<http://www.child-encyclopedia.com/pages/PDF/synthesis-emotions.pdf>.
- Lewis M. (2011b). The self-conscious emotions. In: Tremblay R.E., Boivin M., Peters R., (Eds.) *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development. Retrieved September 2014, from:  
<http://www.child-encyclopedia.com/pages/PDF/synthesis-emotions.pdf>.
- Lieberman, M. D., Eisenberger, N. I., Crockett, M. J., Tom, S. M., Pfeifer, J. H., & Way, B. M. (2007). Putting feelings into words: Affect labeling disrupts amygdala activity in response to affective stimuli. *Psychological Science*, 18, 421-428. Doi: 10.1111/j.1467-9280.2007.01916.x
- Lopes, P., Brackett, M., Nezlek, J., Schutz, A., Sellin, I., Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin*, 30, p 1018 – 1034.
- Mayer, J. & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied & Preventive Psychology*, 4, 197-208.

- Mayer, J. , Salovey, P. Caruso, D. (2004). Emotional Intelligence: Theory, Findings and Implications. *Psychological Inquiry*, 15, 197 – 215.
- Mayer, J.D., Salovey, P., & Caruso, D.R. (2008). Emotional intelligence: new ability or eclectic traits? *American Psychologist*, 63, 503-517.
- Moosa-Mitha, M. (2005). A difference-centred alternative to theorizations of children's citizenship rights. *Citizenship Studies*, 9, 369-388.
- Moss, P. (2007). Bringing politics into the nursery: Early childhood education as a democratic practice. *European Early Childhood Education Research Journal*, 15, 5-20.
- National Scientific Council on the Developing Child (2004). *Children's Emotional Development Is Built into the Architecture of Their Brains: Working Paper No. 2*. Retrieved September, 2014 from <http://www.developingchild.net>
- Nussbaum, M. (2002). Education for citizenship in an era of global connection. *Studies in Philosophy and Education*, 21, 289-303.
- Nussbaum, M. C. (2003). *Upheavals of thought: The intelligence of emotions*. Cambridge University Press.
- Nussbaum, M. C. (2006). Education and democratic citizenship: Capabilities and quality education. *Journal of human development*, 7, 385-395.
- Nelson, N. L., & Russell, J. A. (2011). Preschoolers' use of dynamic facial, bodily, and vocal cues to emotion. *Journal of experimental child psychology*, 110, 52-61.
- Perry, B., & Dockett, S. (2011). 'How'bout we have a celebration!' Advice from children on starting school. *European Early Childhood Education Research Journal*, 19, 373-386.

- Plutchik, R. (2001) The nature of emotions. *American Scientist*, 89, 344-350.
- Reis, D., Brackett, M., Shamosh, N., Kiehl, K., Salovey, P., & Gray, J. 2007. Emotional intelligence predicts individual differences in social exchange reasoning. *NeuroImage*, 35, 1385 – 1291.
- Pons, F., Lawson, J., Harris, P. L., & de Rosnay, M. (2003). Individual differences in children's emotion understanding: Effects of age and language. *Scandinavian Journal of Psychology*, 44, 347–353.
- Ridgeway, D., Waters, E., & Kuczaj, S. (1985) Acquisition of emotion-descriptive language: receptive and productive vocabulary norms for ages 18 months to 6 years. *Developmental Psychology*, 21, 901-908.
- Rinaldi, C. (2001). A pedagogy of listening: a perspective of listening from Reggio Emilia. *Children in Europe*. 1, 2-5.
- Rinaldi, C. (2006) *In dialogue with Reggio Emilia: Listening, researching and learning*. New York, NY: Routledge
- Rivers, S., Tominey, S., O'Bryon, E., Brackett, M. (2013). Developing emotional skills in early childhood settings using Preschool RULER. *The Psychology of Education Review: Vol 37, No 2*. 19 - 25.
- Saarni, C. (1990). Emotional competence. In R. A. Thomson (Ed.) *Nebraska Symposium on Motivation: Vol 36. Socioemotional development* (pp. 115 – 161). Lincoln, NE: U of Nebraska Press.
- Saarni, C. (1984). Observing children's use of display rules: Age and sex differences. *Child Development*, 55, 1504–1513.

- Saarni, C., & von Salisch, M. (1993). The socialization of emotional dissemblance. In M. Lewis & C. Saarni (Eds.), *Lying and deception in everyday life* (pp. 106–125). New York, NY: Guilford.
- Sandel, M. (2009). *Justice: What's the Right Thing to Do*. New York: Farrar, Straus and Giroux.
- Strauss, A. & Corbin, J. (2008). *Basics Of Qualitative Research: Techniques And Procedures For Developing Grounded Theory*. Thousand Oaks, CA: Sage Publications.
- Schaps, E., Battistich, V. & Solomon, D. (2004). Community in school as key to student growth: findings from the child development project. In Zins, J. E., Weissberg, J. E., Wang, M. C., Walberg, H. J. (Eds). *Building academic success on social and emotional learning: What does the research say?* (pp. 189 - 205). New York, NY: Teachers College Press.
- Vygotsky, L. S. (2012). *Thought and language*. Cambridge, MA: MIT press.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997). Learning influences. In H. J. Walberg & G. D. Haertel (Eds.), *Psychology and educational practice* (pp. 199-211). Berkeley, CA: McCatchan.
- Wellman, H., Harris, P., Banerjee, M., Sinclair, A. (1995). Early Understanding of Emotion: Evidence from Natural Language. *Cognition and Emotion*, 9, 117 – 149.
- Widen, S., & Russell, J. (2002). A label superiority effect in children's categorization of facial expressions. *Social Development*, 11, 30 – 52.
- Widen, S., & Russell, J. (2003). A closer look at preschoolers' freely produced labels for facial expressions. *Developmental Psychology*, 39, 114 – 12.
- Widen, S., & Russell, J. (2004). The relative power of an emotion's facial expression, label, and behavioural consequence to evoke preschoolers' knowledge of its cause. *Cognitive*

*Development, 19*, 111- 125.

Widen, S., & Russell, J., (2010). Children's scripts for social emotions: causes and consequences are more central than are facial expressions. *British Journal of Developmental Psychology, 28*, 565 – 581.

Wright, S. (2007). Young children's meaning-making through drawing and 'telling'. *Australian Journal of Early Childhood, 32*, 37-48.

Zigler, E., Gilliam, W.S., & Jones, S.M. (2006). *A vision for universal preschool education*. New York, NY: Cambridge University.

Zins, J.E., Payton, J.W., Weissberg, R.P., & O'Brien, M.U. (2007). *Social and Emotional Learning and Successful School Performance*. London, UK: Oxford University Press.