# **Utah State University**

# DigitalCommons@USU

**Undergraduate Honors Capstone Projects** 

**Honors Program** 

12-2013

# The Importance of Developmentally Appropriate Practice in Early **Childhood Education**

Jeneille Larsen Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/honors



Part of the Early Childhood Education Commons

#### **Recommended Citation**

Larsen, Jeneille, "The Importance of Developmentally Appropriate Practice in Early Childhood Education" (2013). Undergraduate Honors Capstone Projects. 645.

https://digitalcommons.usu.edu/honors/645

This Thesis is brought to you for free and open access by the Honors Program at DigitalCommons@USU. It has been accepted for inclusion in Undergraduate Honors Capstone Projects by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



# THE IMPORTANCE OF DEVELOPMENTALLY APPROPRIATE PRACTICE IN EARLY CHILDHOOD EDUCATION

by

#### Jeneille Larsen

Thesis submitted in partial fulfillment of the requirement for the degree

of

# **DEPARTMENTAL HONORS**

in

Family, Consumer, and Human Development in the Department of Family, Consumer, and Human Development

| Approved:               |                             |  |
|-------------------------|-----------------------------|--|
| Thesis/Project Advisor  | Departmental Honors Advisor |  |
| (Kaelin M. Olsen, M.S.) | (Kaelin M. Olsen, M.S.)     |  |
|                         | Director of Honors Program  |  |
|                         | (Nicholas Morrison, D.M.)   |  |

UTAH STATE UNIVERSITY
Logan, UT

December of 2013

# TABLE OF CONTENTS

| ABSTRACT   |   | i      |
|------------|---|--------|
| TABLE OF ( | CONTENTS  | ii     |
| I.         | INTRODUCTION  | 1      |
| II.        | THEORIES Bronfenbrenner Vygotsky  | 2<br>4 |
| III.       | Piaget DEVELOPMENTALLY APPROPRIATE PRACTICE Core Considerations Principles Teachers.  |        |
| IV.        | CURRENT METHODS  Te Whariki  Montessori  Reggio Emilia  Danish Nature School  Waldorf  Bank Street  High Scope  Tools of the Mind  Project Approach |        |
| V.         | PERFECT METHOD  |        |
| IV.        | CONCLUSION  | 45     |

#### **ABSTRACT**

It is important for educators, parents and families to know how children learn and what options of early education and curriculum are available. Three theorists and their theories on how children learn and obtain information, the NAEYC's statement on Developmentally Appropriate Practice and various preschool's throughout the world and their methods and curriculum is discussed. A "perfect" preschool method is then proposed using all the previous information to formulate the ideal preschool and curriculum.

The Importance of Developmentally Appropriate Practice

# in Early Childhood Education

#### Introduction

The education of young children is important for the enrichment and progression of communities in society, as well as the success and confidence of families and individuals.

Education is an important part of society; current and past mistakes and triumphs can be made known to future generations so that they can continue to progress and be successful. The education of young children plays a vital role in their future education as individuals and groups, their reception of information and their desire to learn more. The education of young children, if done well and right, can act as a springboard for their future learning; it can open the door for children's learning, for their natural curiosity to be fostered and for their minds and hearts to be in a place where they are ready to learn. The lack of education for young children, or if it is done in the wrong way, can hinder children's future abilities and opportunities to learn and progress.

While education is important to society and communities, it is a greater concern of the parents of these young children. Parents understand that knowledge is power and they want to do everything in their power to enable their children to succeed in this life (C. Larsen, personal communication, July 16, 2013). Parents want their children to be ready for school and many parents see the important role that early education can play in their children's lives (J. Major, personal communication, July 18, 2013). They also know that it can create a foundation of social learning and of physical and cognitive development that can be solidly built upon when they enter public schools (J. Major, personal communication, July 18, 2013).

#### **Theories**

#### Bronfenbrenner

Urie Bronfrenbrenner was a psychologist and professor in New York for many years.

Bronfrenbrenner was born in Russia in 1917, but moved to the United States when he was six (Bronfenbrenner Center, 2013). He received a bachelor's degree from Cornell University, a Master's degree from Harvard and did his doctoral work at the University of Michigan. After working as a psychologist in the Army for a few years Bronfrenbrenner began working at Cornell University in 1948 (Bronfenbrenner Center 2013) and remained on the faculty there until his death in 2005 (Ceci, 2005). Bronfrenbrenner was the co-founder of Head Start, a preschool program in the United States, in 1965 (Ceci, 2005).

In 1979 Bronfrenbrenner first proposed his ecological theory. The ecological theory states that different environments, namely five environments, affect the development or function of the individual and the family (Bigner 2010). These five environments are distinct and unique, but are also connected. The five environments, microsystem, mesosystem, exosystem, macrosystem and the chronosystem, describe how individuals and their families are impacted through these environments and also describe the functions of relationships and how interactions take place (Bigner 2010).

At the center of all of these environments is the individual. The individual is not passive in their interactions with others and other environments but they take an active part in their interactions between others and the systems (Bigner 2010). The microsystem is the first environment with which interactions take place and this includes things and people such as the individual's family, peers, school and neighborhood (Bigner 2010). The next environment is the mesosystem, which encircles the microsystem. The mesosystem is the system through which all interactions with other systems takes place, and includes how these systems affects the individual

for good or bad (Bigner 2010). For example a child's difficult experiences in the family with parents can lead to difficulties in school with teachers and vice versa. A mesosystem can be thought of as a bridge that links two places or systems that might not usually be connected such as school or home or church. (Victor Valley, 2013)

Next comes the exosystem. The exosystem includes things like the community, government agencies and other agencies such as parent employment. These things affect the individual, but the individual is not actively involved in these organizations (Bigner 2010). The macrosystem is next and contains things like the culture in which the individual lives. This includes the underlying core values of the society and environment in which the individual lives (Bigner 2010). The individual will be affected by the beliefs, values and behaviors of the culture that surrounds him or her. The final environment is the chronosystem; this system encircles all of the other systems. The chronosystem is the idea of time and history and how historical events or attitudes and beliefs in a certain time or era affect the individual (Bigner 2010).

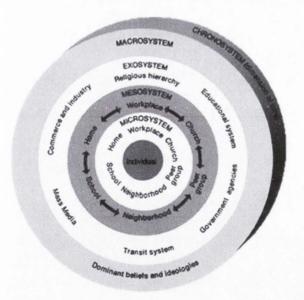


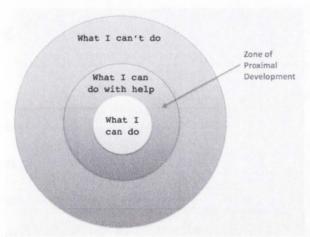
Figure 1. The Ecological Theory. This figure illustrates the five systems of Bronfenbrenner's Ecological Theory (Rider, 1998).

# Vygotsky

Lev Vygotsky was a psychologist born in Russia in 1896. He studied school in Moscow and wrote many books on psychology throughout his life, but focused most of his topics on education and child development (Cherry, 2013a). Vygotsky died in 1934 of tuberculosis and it wasn't until after the Cold War that his works became more widely known (Cherry, 2013a).

One of Vygotsky's theories is the sociocultural theory. The sociocultural theory proposes

idea that development and the acquisition of skills are enhanced by interaction with others, namely parents or care-givers (Bigner 2010). Vygotsky uses the term zone of proximal development or ZPD to describe what a child is capable of learning or what is within a child's ability to learn at any certain time. The lower end of the ZPD incorporates the things that a child can accomplish without adult help while the higher end of a child's ZPD would include tasks that are too difficult for the child but that can be accomplished with adult guidance (Bigner 2010). The idea of ZPD shows the learning potential of children and supports the idea that learning is interpersonal, a shared experience (Bigner 2010).



the *Figure 2*. Zone of Proximal Development. This figure illustrates Vygotsky's Zone of Proximal Development (Culatta, 2011).

When adults guide a child in a task or skill that is beyond them, until the children become competent at the skill themselves, this is called scaffolding (Bigner 2010). In the construction or renovation of buildings scaffolding is used to support the materials until they can stand on their own. Just as in the construction of buildings, scaffolding in Vygotsky's terms is meant to support or guide young children in the acquisition of skills until they can do the skills on their own. Adults often scaffold the learning of a child in this order: spark the interest of the child towards a certain task, simplify task into achievable steps, maintain interest in the activity, show errors and a way to a solution, control the child's frustration and demonstrate correct solution (Bigner 2010).

Vygotsky believed that development in infancy and early childhood is specific to the time and place lived in, so an individual's development and views will be different depending on when and where they grow up (Bigner 2010). Vygotsky also believed that development occurs as a child observes a group interaction and as the child internalizes this, that symbols such as language encourage this internalization, and that a culture is learned through interactions with others in the culture (Bigner 2010). Vygotsky's views show the idea of interdependence in development and that learning is enhanced through interactions with others (Bigner 2010).

#### **Piaget**

Jean Piaget was a psychologist and educator from Switzerland. He was born in 1896 and obtained his doctoral degree at the ripe age of twenty-two (Cherry, 2013b). Piaget's focus was on the intellectual development of children and through his studies decided that children are not less intelligent than older adults but that children just think differently (Cherry 2013b). Piaget termed children as "little scientists" because they actively try to make sense of the world that surrounds them (Cherry, 2013b).

6

Piaget stated that children's cognitive development occurs as they progress through four stages: the sensorimotor stage, the preoperational stage, the concrete operational stage and the formal operational stage (Bigner 2010). Each new stage is defined by age and reached as a shift in the child's thinking about how they understand the world around them (Bigner 2010). The Sensorimotor Stage which lasts from birth to age two is where infants and toddlers acquire knowledge by manipulation of objects and sensory experiences (Bigner 2010). The Preoperational stage from age two to about age seven is where children learn through play and pretend but still do not understand logic or have the ability to see other people's points of view (Bigner 2010). In the Concrete Operational Stage, ages seven to eleven, is where children can being to think more logically although their thinking can be somewhat black and white or rigid and abstract concepts are still difficult (Bigner 2010). Piaget's final stage the Formal Operational Stage encompasses adolescence and on into adulthood. This stage will involve increased logic and reasoning and the ability to understand abstract ideas (Bigner 2010).

Piaget also proposed some useful information on the way that a person obtains thought processes and problem solving skills as well as the ability to organize and use information. Piaget used the words cognition and cognitive development to mean how a person comes to know about the world in which they live (Bigner 2010). A schema is what Piaget defined as the mental and physical actions that occur as a person comes to know or understand. A schema is a category or file of knowledge that can be used to help us understand and interpret our world. A schema is also the process undertaken to acquire this knowledge; through experiences new information can change or add to preexisting schemas (Bigner 2010). When new information is acquired into preexisting schemas this is called assimilation. When information is assimilated it can be altered somewhat to fit into a person's preexisting schema or beliefs (Bigner 2010).

Accommodation on the other hand changes or adjusts preexisting schemas because of the new information obtained. In this process new schemas can also be acquired (Bigner 2010).

## **Developmentally Appropriate Practice**

Developmentally appropriate practice is an approach to teaching young children. The focus of Developmentally appropriate practice or DAP is to meet children where they are at developmentally as individuals and in groups, and then assist the children to reach learning goals (Brendekamp and Copple, 2009a) The foundation for DAP comes from research on how children develop and grow as well as information about effective education in the early years. The approach hopes that such teaching will provide children with optimal education that supports their development and growth (Bredekamp and Copple, 2009b). The purpose of the NAEYC's DAP's as stated by Bredekamp and Copple (2009b) is to "promote excellence in early childhood education by providing a framework for best practice...that promotes optimal learning and development".

#### **Core Considerations**

There are three core considerations when looking at best practice or developmentally appropriate practice for young children (Bredekamp and Copple 2009b). Practitioners use these three areas of knowledge when making decisions in and about the classroom the children. The three considerations are: knowing about child development and learning, knowing what is individually appropriate and knowing what is culturally important (Bredekamp and Copple 2009b). It is important to know about child development and learning and vital to know what is characteristic for a child at each developmental stage. This knowledge comes from research and is important to know so that educators may decide what experiences would be most beneficial

for each child's learning and development (Bredekamp and Copple, 2009b). Knowing what is individually appropriate must also be taken into consideration. Knowing and learning about children individually will help educators to care for them individually and specifically (Bredekamp and Copple 2009b). This happens through observations of and interactions with children to identify interests, abilities and developmental abilities and progress (Bredekamp and Copple, 2009b). It is also important to know what is culturally important. Knowing information about a child's family, background, values and expectations will help educators to create meaningful experiences and opportunities for each child and their families (Bredekamp and Copple, 2009b).

# **Principles**

There are twelve principles about child development to help guide practitioners in DAP. These principles come from researched knowledge about how children develop and learn (Bredekamp and Copple, 2009b). These principles are extensive though not all encompassing and many are interrelated (Bredekamp and Copple 2009b). The twelve principles as stated by Bredekamp and Copple (2009b) are:

- 1. All areas of development and learning are important.
- 2. Learning and development follow sequences.
- 3. Development and learning proceed at varying rates.
- 4. Development and learning result from an interaction of maturation and experience.
- 5. Early experiences have profound effects on development and learning.
- 6. Development proceeds toward greater complexity, self-regulation, and symbolic or representational capacities.
- 7. Children develop best when they have secure relationships.
- 8. Development and learning occur in and are influenced by multiple social and cultural contexts.
- 9. Children learn in a variety of ways.

- 10. Play is an important vehicle for developing self-regulation and promoting language, cognition, and social competence.
- 11. Development and learning advance when children are challenged.
- 12. Children's experiences shape their motivation and approaches to learning.

#### **Teachers**

The intentionality of teachers and practitioners in DAP is of great importance for the real learning of children in the classroom. Bredekamp and Copple (2009b) said "The core of DAP lies in this intentionality (of teachers intentionally helping children to reach goals) in the knowledge that practitioners consider when they are making decisions, and in their always aiming for goals that are both challenging and achievable for children." Teachers have five guidelines to help them identify and act upon their role as teachers. The five guidelines given by Bredekamp and Copple (2009b) are:

- 1. Creating a caring community of learners
- 2. Teaching to enhance development and learning
- 3. Planning curriculum to achieve important goals
- 4. Assessing children's development and learning
- 5. Establishing reciprocal relationships with families

Each of these guidelines must be equally used and balanced so as to provide good practice in the early education of young children (Bredekamp and Copple 2009b).

# **Current Practices in Early Childhood Education**

#### Te Whariki

Te Whariki is the New Zealand Ministry of Education's policy for the education of young children. Te Whariki translated from the Maori language literally means "the woven mat" or

"carpet" (New Zealand Ministry, 2009). The goal of educators is to weave together a program of learning for the children they teach using the curriculum's principles, the strengths and interests of the children and families as well as the program (New Zealand Ministry, 2009).

The New Zealand Ministry of Education (2009) has said that

"Te Whāriki is a framework for providing tamariki/children's early learning and development within a sociocultural context. It emphasizes the learning partnership between kaiako/teachers, parents, and whānau/families. Kaiako/teachers weave an holistic curriculum in response to tamariki/children's learning and development in the early childhood setting and the wider context of the child's world."

Curriculum. The Te Whariki curriculum is based on the New Zealand Ministry's (2009) hopes for children "to grow up as competent and confident learners and communicators, healthy in mind, body, and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society." There are four main principles to the early childhood curriculum: empowerment, holistic development, family and community and lastly relationships (New Zealand Ministry, 2009). Empowerment involves the idea that children and their families should be empowered or enabled to learn and grow (New Zealand Ministry, 2009). Children should learn ways to discover knowledge by taking some responsibility for their own learning and develop their own self-worth while understanding their own uniqueness.

Viewing children holistically is seeing a child's whole context, including cognitive, social, cultural, physical, emotion land spiritual contexts (New Zealand Ministry, 2009). A holistic approach understands that any experience of a child will be affected by all of these contexts as well as contributing to their development. Family and community are an essential

part of the curriculum and the well-being of children (New Zealand Ministry, 2009). A child's learning and development is nurtured when the welfare of the community and their family is good; this encourages consistency in all facets of the child's life. The way that children create relationships with people, places and things impact their learning. Development is fostered as the children interact with other children, adults and their environment (New Zealand Ministry, 2009).

These four principles have what are termed "strands" that come off of them. There are five strands and each strand includes goals for learning and development (New Zealand Ministry, 2009). The five strands are: well-being, belonging, contribution, communication and exploration (New Zealand Ministry, 2009). Well-being includes an environment where children are safe and their emotional and physical health is supported. Children will feel a sense of belonging as they are in an environment where they feel they have a place and know boundaries and routines (New Zealand Ministry, 2009). Contribution involves having an environment where each child's contribution is valued and each child has the same learning opportunities regardless of age, gender or background (New Zealand Ministry, 2009). The communication strand includes children developing verbal and non-verbal communication skills and experience language and stories from their own and other cultures (New Zealand Ministry, 2009). Exploration is the children being active learners as they discover in their environment (New Zealand Ministry, 2009). These principles and strands are what are woven together to become the "Te Whariki" which should become an integral part of each child's learning and development (New Zealand Ministry, 2009).

Role of Child. Te Whariki understands that the center and purpose early childhood education is the children. The New Zealand Ministry of Education (2009) has said that the

curriculum"is about the individual child. Its starting point is the learner and the knowledge, skills and attitudes that the child brings to their experiences." Te Whariki has established their curriculum in a way that it is the hope that each child brings their unique experiences, skills, needs and views about the world to a place where these can be expounded, developed and discovered (New Zealand Ministry, 2009).

**Role of Teacher**. Te Whariki recognizes that the adults in the children's lives play an integral role in the curriculum. It is understood that children depend on adults physically and emotionally much more in early childhood than in later years. Therefore teachers are expected to be knowledgeable about child development, learning and curriculum (New Zealand Ministry, 2009). They must also be adept at implementing curriculum, be thoughtful about what they do and realize they are role models. Teachers must also be able to notice, recognize and respond to the children's learning on a daily basis (New Zealand Ministry, 2009). Te Whariki also has what is called the Kei Tua o te Pae or the Assessment for Learning: Early Childhood Exemplars (New Zealand Ministry, 2009). This is a teaching resource on best practice that is implemented for the Te Whariki teachers to improve their teaching. Teacher read a series of books meant to assist teachers in strengthening the learning of their children (New Zealand Ministry, 2009). The books also show teachers how children and parents can participate in their own learning (New Zealand Ministry, 2009). Assessments are also made on the children, which narrate stories of the children's experiences and moments or learning or engagement. These assessments are then placed in each child's portfolio for teachers, families and children to read (New Zealand Ministry, 2009). It is the New Zealand Ministry of Education's (2009) hope that Kei Tua o te Pae will help teachers to develop practices that integrate assessment and quality learning

experiences and to engage with children, parents, and whanau about children's learning and progress."

Parent Involvement. The curriculum understands that learning begins at home and families and other environments play a huge role in a child's early education. It is understood that not just parent's play a role in this education but entire families (New Zealand Ministry, 2009). Families must know what goes on in the classroom just as teachers must know about families and home life because not only do home and school life affect each other but consistency across both environments can and must be achieved (New Zealand Ministry, 2009).

#### Montessori

Maria Montessori was one of the first female physicians in Italy. She was born and raised in the small town of Chiaravalle on Italy's Eastern coast, during the late 1800's (American Montessori, 2013a). Maria was raised in a family that valued knowledge and Maria went to school to study engineering, then medicine and went on to psychiatry and education (American Montessori, 2013a). In time Maria became known for the educational method she developed, based on the scientific observations of children (American Montessori, 2013a) that focus on how children are natural learners (American Montessori, 2013b). On January 6, 1907 Maria opened a childcare center in a poor, inner city part of Rome (American Montessori, 2013b). This became the first Casa dei Bambini which means Children's House in Italian (American Montessori, 2013b) and was the place where Maria observed how the children absorbed information from their surroundings (Epstein & Seldin, 2010). Maria did everything she could to foster the children's natural desire to learn by giving them materials she had designed (American Montessori, 2013b) and the time and freedom to explore what they were interested in the children taught themselves (Epstein & Seldin, 2010).

Curriculum. The Montessori approach to education is child-centered that strives to foster the natural learning and curiosity of children (American Montessori, 2013b). The environment in a Montessori classroom plays a large role in this goal. The classroom is like a learning laboratory for children and so classroom environments are thoughtfully set up so that natural learning at its best can occur (American Montessori, 2013a). Classrooms are set up to allow easy movement and collaboration between students as well as encouraging concentration while keeping a sense of order (American Montessori, 2013d). Materials are available for all children on easily accessible shelves (American Montessori, 2013d). Classrooms usually have twenty-five to thirty children that cover a two to three year age span (American Montessori, 2013d). Children of older and younger ages are grouped together in the hopes that younger children will learn and be encouraged from older children and the older children find value in being role models (American Montessori, 2013d) and reinforcing the mastery of skills already learned (American Montessori, 2013a). It is also the belief that the teacher is not the main or only source of instruction or knowledge for the children, but that the environment and especially another child is oft times the best teacher (American Montessori, 2013d).

Children will stay in the same classroom for up to three years with about two-thirds of the same class returning every year (American Montessori, 2013d). This helps to create stability and continuity with a strong sense of community in the classroom (American Montessori, 2013d) and to create more meaningful bonds among the children and teachers (American Montessori, 2013c). The focus of the Montessori approach is the development of the "whole child" (American Montessori, 2013d) seeing all the physical, social, emotional and cognitive contexts of a child (American Montessori, 2013a). Montessori classrooms and structure are designed to foster the children's independence and empowerment; children move freely through the

classroom taking responsibility for their own interests and needs, and teachers become a facilitator and guide rather than instructor (American Montessori, 2013d). It is the strong belief of Montessori educator's that children best gain mastery of skills and concepts through exploration, imitation, repetition and trial and error and the children are given ample time to do this (American Montessori, 2013e).

Role of Child. Children are expected to be natural learners in a Montessori classroom, but this in not done by forcing the children to learn themselves but by allowing the children to discover information about what interests them on their timeframe (American Montessori, 2013d). In a Montessori classroom a child takes responsibility for themselves and what they are interested in learning and therefore takes on the role of teaching themselves (American Montessori, 2013d). Children touch, manipulate, explore, handle and move throughout everything in the classroom. They have the freedom to explore, discover and choose to do what interests them in the hopes that children will learn how completely focus their mind on one thing and master it (American Montessori, 2013d). Children improve their cognitive skills through first-hand experience such as seeing, hearing, tasting, smelling, touching and movement with various sensory-motor activities and other materials throughout the room (American Montessori, 2013a). Children are free to work alone or with others and can use an activity for any amount of time. They are expected to not disturb or intrude on others, to not damage anything and to put back an activity when done (American Montessori, 2013d).

Classrooms are the children's community and they are largely responsible for the classroom, environment and helping each other. Children not only decide for themselves what they are going to learn about, but they prepare their own snacks when they are hungry, use the bathroom by themselves and help each other clean up spills and messes (American Montessori,

2013d). Children can also take on a mentoring or tutoring role (Epstein & Seldin, 2010) for younger children and by being role models for them (American Montessori, 2013d). Children are a part of a learning triangle with the teachers and the environment (American Montessori, 2013a). The child's role in this triangle is to use the environment and its materials to continue learning and developing and to interact with the teacher for support and guidance when necessary (American Montessori, 2013a).

Role of Teacher. The role of a teacher in a Montessori classroom is one of guide rather than instructor. It is the challenge of the teacher to connect each child with activities that will meet their needs and interests and that are at a developmentally appropriate level for them (American Montessori, 2013d). In a classroom where children are majorly responsible for the classroom, their time and teaching it is the teacher's role to guide and support when necessary (American Montessori, 2013d). The main focus is not on the teacher when children are teaching and mentoring each other. Teachers must find a way of just being with the children, as a guide, supporter and fosterer, and this will allow the children to develop into themselves (MariaMontessori, 2013). Other words for a teacher in a Montessori classroom would be: facilitator, mentor, coach guide (American Montessori, 2013d) Maria even used the word "directress" (American Montessori, 2013e). But this is not a passive role. Teachers must know and pay attention to and develop a relationship of trust with each child (MariaMontessori, 2013). It takes practice for a teacher to know when to step in and offer guidance or to let a child continue to figure it out (American Montessori, 2013e). It also takes some experience to know when it is appropriate to challenge the child with the next learning step so that children stay challenged, not bored, so that they are always eager to learn (American Montessori, 2013e).

As Montessori teachers carefully observe and come to know each child they also come to know the needs and skill level of the children (American Montessori, 2013d). Teachers will also give children oral exams or have a child demonstrate skills by teaching another child or giving a presentation (American Montessori, 2013d). Much of the time in the classroom is for the children work on activities they choose. At some point the teacher will give a brief presentation to small groups of children at a time with the intention of giving the children just enough information to capture their attention or spark their interest (American Montessori, 2013d).

Many Montessori schools have portfolios of each students work and the teacher will meet with parents a few times a year to decide what to place in their child's portfolio (American Montessori, 2013d). Teachers also meet with parents and students two to three times a year in a family conference to go over portfolios and teacher assessments of the child. Many Montessori schools also have teachers write a Narrative Progress Report which includes information on the child's work, social development and mastery of skills (American Montessori, 2013d).

Maria Montessori defined what she called sensitive periods as windows of opportunity when children grow that they are more able to learn a task, skill or challenge (American Montessori, 2013d). Teachers must make sure that they are matching lessons and materials that will best suit each child's sensitive periods when learning would be at its most natural for the child (American Montessori, 2013d). Teachers must also develop an understanding of each child's learning style so they can help them be ready to learn and to love learning. Ultimately teachers should strive to help the children to learn on their own by retaining their natural curiosity, creativity and intelligence (American Montessori, 2013d). A huge role of the Montessori teacher is the preparation of the classroom environment and in choosing materials

and activities that would be well suited for the children's interests and sensitive periods (American Montessori, 2013e). Teachers also model core values such as empathy, compassion and acceptance so as to foster an awareness of community, the ability to think outward and respect of others in each child (American Montessori, 2013e).

Parent Involvement. Parents are kept up to date about their children's activities and interests and number of different ways. Parents meet with teachers a few times a year to discuss the children's portfolio's (American Montessori, 2013a). Parents will also meet another few times a year with their children and the teachers in a parent teacher conference to discuss teacher assessments and review portfolios and self-evaluations (American Montessori, 2013a). Parents are encouraged to extend learning opportunities and children's interests at home and away from the classroom. Parents are usually familiar with the learning styles of their children and can help to foster interests, master skills and keep teachers informed and up to date on interests and achievements (American Montessori, 2013d).

### Reggio Emilia

beginnings and opportunities for many in Europe and this was especially true than for the people in the city of Reggio Emilia in Northern Italy. Many desired a change to help create a new and just world free from oppression (North American, 2013a). So the people of Reggio Emilia built a school with their own hands to be able to teach and invest in their children to be able to build such a world (North American, 2013a). An important feature of Reggio Emilia schools today is how teachers and parents work very close together to manage the preschools (North American, 2013a). The ability for the schools to have done that and continue to do so today is the long time tradition of cooperation between people in the region of Emilia Romagna (North American,

2013a). Their way of life and culture involves all people working together cooperatively in all aspects of life such as economy, agriculture, unions and reactions to crises (North American, 2013a).

Many of the preschool's were founded by common people continued into the 1960's when the remaining preschool's came to be under the city governments' (North American, 2013a). Loris Malaguzzi, a local teacher and known as the founder of the Reggio Emilia approach, worked closely with the men and women who began the preschools and was very influential in getting the government to manage the school's in the 1960's (North American, 2013a). The school's in Reggio Emilia have continued to study and develop new ways of teaching children (North American, 2013a) and the Reggio Emilia approach is used throughout the world (North American, 2013b). It is especially strong in North America with the North American Reggio Emilia Alliance, or NAREA, continuing to strive for quality teaching and schools for young children (North American, 2013b)

Curriculum The Reggio Emilia approach has been developing for over forty years and comes from philosophical principles, research and experience (Reggio, 2013). The work of many childhood psychologists and philosophers such as Paiget, Vygotsky and Bruner have been influential the development of the curriculum (Reggio, 2013). Because of the deep set community values held by the founders of the preschool and the research of theorists the Reggio Emilia approach is very connected in educational theory in application or practice (Reggio, 2013). Reggio educators believe that any school has an identity in the community and that education and relationships of children come not just from teachers but also from parents, the community and the values held by them all (Reggio, 2013). Education is seen as not only a family and teacher responsibility but a public one as well (North American, 2013c).

Of children Loris Malaguzzi (Stroum, 2013) said

"All children have preparedness, potential, curiosity; they have interest in relationship, constructing their own learning, and in negotiating with everything the environment brings to them. Children should be considered as active citizens with rights, as contributing members, with their families, of their local community." The Reggio approach focuses on the image of the child, knows that they have the potential develop and who learns and grows through their relationships with others (Reggio, 2013).

A strong theme of the Reggio Emilia approach is the belief that children not only have the ability but the right to express their thoughts, ideas, learning or emotions in many different ways (Reggio, 2013). This belief is termed the hundred languages of children, implying that there are so many ways through which children can communicate their thoughts or emotions (Reggio, 2013). Reggio teachers and classrooms aim to support the many languages of children and provide them with a variety of materials, media, experiences so that children have the opportunity to use many different vehicles and paths to communicate (Reggio, 2013). The environment is very important in the Reggio approach, being thought of as the third teacher with the ability to spark curiosity, learning and interaction (North American, 2013c). Light, transparency and natural materials and important and readily available in the classrooms (North American, 2013c). Reggio schools include a space or area called an atelier or an art studio and each classroom has a mini-atelier as well (Reggio, 2013). The arts play a large role in the Reggio approach so it is important to have a place for it. The ateliers are to be used to give children daily experience with use of different kinds of materials or media to support the hundred languages of expression (Reggio, 2013).

Role of Child. In a Reggio classroom children are given ample time to experience and express themselves through various activities and opportunities (North American, 2013c). At some point during the day children and teachers will gather to talk and visit (Stroum, 2013). During this time one teacher will listen while another teacher will take notes on what the children are saying; what children say is highly valued and helps to understand their interests and use of the hundred languages (Stroum, 2013). Children also have time during the day to work on projects, start new projects, be in groups and work with the atlierista (Stroum, 2013). Children are in a learning partnership with teachers and parents. Parents and teachers support children as they construct their own learning in the classroom (North American, 2013c). Children will often stay in the same classroom for up to three years and so will make deep connections and relationships with teachers and other children and parents (North American, 2013c).

Role of Teacher. An atlierista, or studio teacher, is also employed to be with the children in the ateliers and classrooms (Reggio, 2013). The atlierista must have a visual arts education and they work closely with other teachers to ensure the children's experiences align with school and community goals and values (Reggio, 2013). Each Reggio school or classroom also has an in-school kitchen that is visible to the children so that they can be involved in almost every aspect of their school experience (Reggio, 2013).

The Reggio approach includes the idea that children are partners in learning with teachers and parents (North American, 2013c). The word progettazione, translated from Italian means planning, but is used to define this learning process; children, parents and teachers work together to observe, document and interpret children's learning experiences (North American, 2013c).

**Parent Involvement**. The parent involvement in the classroom, management, decision-making and curriculum is one of the things that Reggio Emilia is known and valued for (Reggio,

2013). It was parents who originally began the preschool and parents continue to participate to make sure that the schools are adhering to community values (Reggio, 2013). It is believed that the education of young children is a family and parent responsibility. Parents are the third partner in the teacher, child, and parent partnership of learning (North American, 2013c). Teachers and parents, support children in their right to build their own learning. Parents play a crucial supportive role in progettazione or the process of learning, which includes reciprocal dialogue and interaction between children and the world around them (North American, 2013c). Families and parents participate in almost every school affair through visits to working with teachers to making decisions about school policies (North American, 2013c).

#### **Danish Nature Schools**

In the 1950s a philosophy began to develop in the Scandinavian countries for children to have school and instruction out in nature, with the idea behind it being that contact with nature in a natural setting is crucial to a child's development (Tree, 2013). The idea began to spread and by the 1980's nature schools were integrated into Danish early education programs for children seven years old and younger (Tree, 2013). The schools spread to Great Britain in the early 1990's and today they are firmly integrated throughout the Danish and English education systems (Tree, 2013).

Curriculum. Forest Schools view children holistically and aim to enhance learning through positive outdoor experiences (Tree, 2013). They aspire to develop in children: self-awareness, self-regulation, intrinsic motivation, empathy, social and communication skills, independence, a positive mental attitude, self-esteem and confidence (Tree, 2013). Outdoor experiences can be done for particular projects or in sessions (Archimedes, 2012). Most outdoor experiences begin from the school grounds so that children can become comfortable learning

outdoors in a place that is familiar to them (Archimedes, 2012). Outdoor experiences can then be moved to other sites away from the school. Once the school or group has reached the site of the outdoor experience time will be taken to familiarize them with the area and creating physical and behavior boundaries as well as rules and routines for safety (Archimedes, 2012). Next steps will be taken to ensure that the children's basic needs of warmth, food, drink and safety are met (Archimedes, 2012) so that higher learning can occur; children play as much role in these steps as possible (Tree, 2013).

Once basic needs are met project work can begin. Each session in the forest is made around a theme, but themes can develop or be flexible depending on the needs and interests of the children because learning is child led (Archimedes, 2012). Projects from the forests can also be taken back to the classroom to extend and expand learning opportunities (Archimedes, 2012). Tools will be used accomplish basic needs tasks; it is the hope that children will enhance their trust and self-confidence as well as improving their fine and gross motor skills through the use of tools (Archimedes, 2012).

Role of Children. Children take a very active role as learners in forest schools (Archimedes, 2012). Before learning and project activities can take place, children must understand and adhere to the boundaries and routines as well as taking care of their basic needs (Archimedes, 2012). Children must work as a team as they learn to build shelter, light fires and through the games and activities. In order for the children to be successful in this outdoor learning environment they must develop self-esteem as well as inter and inter-personal skills throughout all the activities and experiences (Archimedes, 2012). Children are invited to learn about what interests them but are allowed to learn at their own pace and timetable (Tree, 2013). The projects and activities that take place are learner led so the children take part in deciding

what they will learn about (Archimedes, 2012). In working on projects and just being in the woods children make decisions, develop their own ideas, problem solve and take risks (Tree, 2013). This will help them to learn and improve their well-being and confidence (Tree, 2013). Sessions in the forest are usually themed and can cover most any topic from butterflies to spies or even fairies (Archimedes, 2012).

Role of Teacher. Forrest practitioners are individuals who are specially trained in nature and wildlife skills as well as some child education (Archimedes, 2012). Forrest practitioners are used when a forest school project or session happens and any other teachers work alongside with the forest practitioner; teachers can be forest practitioners. Teachers and practitioners develop goals for each session and evaluate progress to make sure that these are being met (Archimedes, 2012). Forrest practitioners and teachers evaluate children's progress and adjust the schedule and experiences to meet needs. At the end of the day or the project/session the practitioner will review by helping the children reflect on their experience and enabling them to apply what they have learning to their daily lives (Archimedes, 2012). Teachers play a large role in maintaining and extending learning when children return to the classroom (Archimedes, 2012).

Parent Involvement. Parents of children in forest schools understand the importance of nature in helping a child to learn as well as giving them opportunities to develop confidence and self-esteem (Kenny, 2010). Parents also play a role in continuing education at home through reviewing (Kenny, 2010). Children take something from the woods home with them each time they go so that parents will be interested and communicate about the child's experience and support them in their learning (Kenny, 2010).

#### **Waldorf Education**

Rudolf Steiner was an educated philosopher from Austria and the founder of the ideas of Anthroposophy (Steiner, 2013d). Anthroposophy is a spiritual philosophy based on basic human needs and is sometimes called a spiritual science (Mays & Nordwall, 2013). Steiner was able to apply his ideas to agriculture, medicine and architecture as well as education (Steiner, 2013d). The first Steiner school was opened in 1919 for children of employees of the Waldorf cigarette factory and Rudolf was asked to be the founder (Steiner, 2013d). Though it had simple beginnings in Central Europe, Steiner schools and education are now known throughout the world today the school's acknowledge Rudolf Steiner as the founder of the Steiner schools but do not promote Anthroposophy and the words Steiner and Waldorf are commonly used interchangeably (Steiner, 2013d).

Curriculum. Steiner schools strive to teach universal human values and provide meaningful learning opportunities in an unhurried yet creative environment (Steiner, 2013d). They view children holistically and try to account for all those needs and place emphasis on the different phases of child development (Steiner, 2013). Art and imagination are encouraged because they are viewed as an important part in learning (Steiner, 2013d). Early education Steiner schools focus on allowing children time and opportunities to develop social, emotional and physical skills in a safe yet creative environment (Steiner, 2013a). The physical environment is viewed as impactful on the senses of young children so classrooms have furniture, materials and toys that are made from natural materials (Steiner, 2013a). Literacy, numbers and language are encouraged in the classroom through hands on activities, play and a culture that has a long oral tradition (Steiner, 2013a). Steiner classrooms have dependable routines that include free play, circle time, snack and usually end with the strong cultural

tradition of telling stories or puppetry (Steiner, 2013a). This strong daily routine is in place so that children will have security in knowing what to expect (Steiner, 2013a).

A Main Lesson will start off the daily routine; main lessons focus on one subject for up to four weeks and are taught through variety of activities, techniques and resources (Steiner, 2013b). Eurhythmy is incorporated in the schools to help develop concentration, spatial awareness and an understanding of others (Steiner, 2013b). Eurhythmy lessons go along with main lesson and curriculum themes (Steiner, 2013b). This is done to allow greater understanding of the subject with opportunities to learn about one thing in a variety of ways. Festivals, games and sports are socially and culturally important to Steiner schools and are highly promoted (Steiner, 2013b).

Role of Child. Children in Steiner schools are allowed to be in and develop from whatever phase of development they are in (Steiner, 2013d). Children are expected, but not forced, to come and take part of the activities, experiences and lessons available (Steiner, 2013b). Children will listen to main lessons and do related activities, take part in the cultural and seasonal festivals and be a part of eurhythmy lessons, games and sports (Steiner, 2013b). Children also learn the tradition of oral history through puppetry and storytelling (Steiner, 2013a).

Role of Teacher. Teachers determine the curriculum and methods of delivery and are required to have up to date information on child development (Steiner, 2013b). Teachers use an artistic activities and a variety of techniques and resources to give the daily main lesson (Steiner, 2013b). It is said that lesson are given "artistically" which requires teachers to be not only professional and committed but imaginative and responsive (Steiner, 2013c). It is believed that human relationships play an integral part in engaging and learning so much of the lesson material

is delivered in a narrative form (Steiner, 2013c). A teacher can stay with one group of students for eight years so their understanding of the students grows deep; teaching and delivery must reflect their understanding of the student's needs (Steiner, 2013b). Teachers work with parents of children to create a holistic picture of each child so that they both can be supporting their needs and development (Steiner, 2013b).

Parent Involvement. Parents play a large role in supporting the social and cultural values that are so integral in the Steiner schools. Parents, as well as the community, are invited to participate in festival celebrations (Steiner, 2013b). Since children stay in the same classroom for up to eight years, parents work very closely with the teacher of their children (Steiner, 2013b). Parents work with teachers to make a picture of their child so that all can support the child's growth and development. At the end of the year the parents will receive a report on their child about their time and experiences in school (Steiner, 2013).

#### **Bank Street**

Bank Street School for Children began as a sort of laboratory nursery school in an effort to identify the environments that would allow children to learn in their best way possible (Bankstreet, 2013). The school had teachers, psychologists and researchers to identify these environments and then share that information with other teachers (Bankstreet, 2013c). Through the Bureau of Educational Experiments a teacher Lucy Sprague Mitchell opened the Bank Street School in 1919 in New York City (Bankstreet, 2013c). In 1930 the Bureau was on 9 Bank Street until 1970 when it moved to West 112<sup>th</sup> Street, where it has remained until now (Bankstreet, 2013). Today Bank Street is not only a fully serviced children's school, but includes a Graduate school to train more teachers and outreach programs for the community and educators (Bankstreet, 2013c).

Curriculum. Bank Street School is a working model or "demonstration school" for the adjoining Graduate school's approach to teaching and learning in the classroom (Bankstreet, 2013c). The goal of the school as stated by Bankstreet (2013e) is to "improve the education of children and their teachers by applying to the education process all available knowledge about learning and growth, and by connecting teaching and learning meaningfully to the outside world." It is Bank Street's hope that this will in turn strengthen individuals, families, schools, communities and society (Bankstreet, 2013e). Bank Street enrolls students and faculty from a variety of races and ethnicities in an effort to represent out diverse society, and classrooms are strongly promote anti-biases (Bankstreet, 2013a). The school has Upper, Middle and Lower Schools for the varying ages and developmental stages of the students (Bankstreet, 2013e). The school in its entirety has four hundred and twenty-one students, with children being three years of age up through the eighth grade, and has fifty-two full time teachers (Bankstreet, 2013f). This creates an eight to one student to faculty ratio (Bankstreet, 2013f).

The Lower School is for children ages three to six and has one classroom for three and four year olds, two classrooms for four and five year olds and two classrooms for five and six year olds (Bankstreet, 2013d). The environment, materials and use of physical space in each classroom are all arranged and made to meet young children's needs (Bankstreet, 2013d). Children are taught with an emphasis on concrete experiences (Bankstreet, 2013d). The school places emphasis on using a wide variety of open-ended materials within the class so that the children's education is enhancing their development (Bankstreet, 2013f). A librarian, music, eurythmic and Spanish teacher work with each classroom at various times throughout the day (Bankstreet, 2013d). Bank Street focuses on understanding and teaching the whole child, which includes their entire social, physical, emotional and intellectual self (Bankstreet, 2013c). To

accomplish this Bank Street has developed goals and curriculum specific to young children for each of the following areas: social studies, emergent literacy, mathematics, science, Spanish, art and shop, music, library and movement and physical education (Bankstreet, 2013d). Bank Street not only uses the Grad school's approach to education but adheres to the New York State Prekindergarten Learning Standards (Bankstreet, 2013b).

Role of Child. In the Lower School there are goals and curriculum for nine various subjects in order to provide children with exposure to possible interests and opportunities to develop skills in many areas (Bankstreet, 2013d). Children have time to explore a variety of materials, activities and places which allow them to develop their flexibility and imagination (Bankstreet, 2013b). This encourages children to be active in their own learning by selecting activities that interest them and then executing and problem solving through those activities. Children develop social and emotionally as the build relationships of trust with others and work in groups (Bankstreet, 2013b). Social studies is incorporated throughout the day as children work together, resolve conflicts and as they learn connections and relationships that are crucial for survival in this world (Bankstreet, 2013d). Language and literacy develop in children by building up the social and cognitive skills they already have (Bankstreet, 2013b). Literacy in promoted with many picture books throughout the classroom and children attend the library once a week to choose books to take home (Bankstreet, 2013d). Children are encouraged to be curious yet respectful to their surrounding natural and physical environment (Bankstreet, 2013d).

Role of Teacher. Teachers at Bank Street take on the role of facilitator of learning (Bankstreet, 2013b). To be able to do this effectively teachers remain up to date and informed on current information and practices in child development and education (Bankstreet, 2013b). Teachers create goals and strategies for classrooms and children, and will evaluate and revise

goals based on child needs and interests. Themes for classrooms are chosen by teachers after observation of the children and their interests and needs (Bankstreet, 2013b). Classroom teachers incorporate Spanish into the classrooms and so must work closely with the Spanish teacher. The Spanish teacher will also try to make connections to themes or interests in the classroom so that learning is supported in all aspects of the child's school experience (Bankstreet, 2013b). The music and Spanish teachers work collaboratively together so that children can learn and share a Spanish song in the weekly assembly or in classrooms (Bankstreet, 2013b). Classroom teachers create a sequence of art experience. This fosters individual child development as children are asked to focus more on the process of making art and are allowed to explore and investigate mediums and materials (Bankstreet, 2013b).

Parent Involvement. Parents are invited and encouraged to support their child's development and education in a number of different ways at the Bank Street School. A large part of a child developing holistically is helping them to acquire social and emotional skills (Bankstreet, 2013c). Parents play an important role in making connections between home and school and in encouraging children to create relationships of trust with teachers and peers (Bankstreet, 2013b). Parents are invited to a weekly singing assembly where children share what they have learned through song, dance and playing instruments (Bankstreet, 2013b). Each year in the spring the Bank Street School has a field day in the Riverside Park where parents and families are invited to attend and sing and dance with their children (Bankstreet, 2013b).

# **HighScope**

The HighScope program began in 1970 and was originally designed as a camp program for talented teens (Epstein, 2013). David Weikart founded the organization and he and other cofounders chose the name HighScope, "high" to show their level of aspiration and "scope" to

show the breadth of their goals (Epstein, 2013). HighScope largely incorporates the theories of Jean Piaget in their curriculum, with the belief that children learn best when they gain understanding through direct experiences (Epstein, 2013). Development of the whole child is the focus of the program, with emphasis on improving cognitive skills through hands-on experiences (Epstein, 2013). HighScope was designed to develop logicomathematical and spatiotemporal awareness in children. (Hohmann & Weikart, 1995) The program also recognizes the importance of helping children gain the cognitive understanding necessary for later academic success in reading and math. (DeVries & Kohlber, 1987)

Curriculum. A large part of the program's curriculum includes what is called the plando-review sequence, which was created to help children acquire greater conceptual understandings (Henniger, 2010). Plan-do-review sequence involves teacher and student sitting down at the beginning of the day and the child will plan the task and activities they want to do during their free-time, then they execute those activities and later that day review what was done and learned (Henniger, 2010). Children and teachers become active partners as they mold the child's experiences and education (HighScope, 2013a). The curriculum also emphasizes adult and child interactions as well as a carefully thought out environment (HighScope, 2013a). Adults encourage learning through adult child interaction when they work alongside children (HighScope, 2013e). The classroom environment is divided into areas of interest, and have materials and activities for specific types of play within those areas (HighScope, 2013e).

Materials are consistently placed on accessible shelves with easy labels so children can retrieve and put away materials on their own (HighScope, 2013e).

Learning in the classroom is centered on eight areas: approaches to learning, social and emotional development, physical development and health, mathematics, creative arts, science

and technology, social studies and lastly language, literacy and communication (HighScope, 2013f). These eight content areas come from the National Education Goals Panel which has guidelines about the school readiness of children (HighScope, 2013f). HighScope aims to teach beyond academia by promoting independence, curiosity, decision making, creativity and problem solving and applying these to the eight content areas (HighScope, 2013f). Further learning of these eight content areas is enhanced by the use of key developmental indicators or KDI's (HighScope, 2013f). KDI's are statements that identify an observable child behavior and define learning goals for children (HighScope, 2013f). Each KDI is connected to at least one of the dimensions of school readiness defined by the National education Goals Panel (HighScope, 2013f).

Role of Child. Children take a very active role in determining their actions and learning at HighScope. Each day they sit down in a group of four or five children (HighScope, 2013d) with a teacher and plan out their activities for the day (HighScope, 2013g). They will then be given free time and do the activities they had planned (Epstein, 2013). Usually after free time, the work period, children will be asked to review or reflect on the activities they have done. The review can take place in small groups or with the whole class (Epstein, 2013). Epstein (2013) defines this whole process as "active participatory learning" where children become active partners with their teachers in their own learning and education ((HighScope, 2013a).

Throughout their time in the classroom children are expected to create relationships with adults, teachers and peers in the classroom (HighScope, 2013g). Children will also take care of their own personal needs and routines throughout the day (HighScope, 2013g).

**Role of Teacher**. Teacher's play a large role, being called active partners, in helping the children of HighScope to shape their education and learning experience (HighScope, 2013a).

Teachers facilitate the plan-do-review sequences by helping children identify activities for the day and creating questions or experiences to help them review their work (Epstein, 2013).

Teachers use KDI's as they are planning and setting up the classroom environment so that all aspects of the children's experience in the classroom will support their learning (HighScope, 2013g). It is the responsibility of the teachers to do assessments of the children they work with (HighScope, 2013d). HighScope uses the Preschool Child Observation Record or COR and have also developed their own specialized tool for assessing literacy, the Early Literacy Skills Assessment or ELSA (HighScope, 2013d). Every day teachers will write brief descriptions of the children's behavior for the day, which can then be used to help plan activities that will encourage each child to develop (HighScope, 2013d).

Three areas of emphasis for teachers, especially in HighScope teacher trainings, are adult-child interactions, classroom and material layout as well as the daily routine (HighScope, 2013e). Adults and teachers play the role of facilitator in adult-child interactions; teachers must learn to work along-side the children and allow the children some control in the interactions (HighScope, 2013e). Facilitating is an active, not a passive role, and teachers are expected to be as active and engaged as the children while in the classroom (HighScope, 2013c). Teachers must create genuine relationships with each child, be supportive a children's ideas and choices and provide materials and experiences to best help each child develop (Epstein, 2013). Teachers also plan and prepare workshops for parents on child development and hold two parent teacher conferences each year and will do at least one home visit for each child throughout the year (Epsteing, 2013).

**Parent Involvement**. HighScope realizes the importance of parent influence in young children's education and development. HighScope provides parents with many different ways to

support the learning and experiences taking place in the classroom (Epstein, 2013). Parents are encouraged to provide learning materials at home, and invite their children to plan and carry out activities and then talk about them (Epstein 2013). Parents are also encouraged to have more solid routines so children know what to expect and use the same conflict resolution steps employed in the classrooms (Epstein, 2013). Classroom visits from parents are always welcomed and parents are often invited to attend filed trips or other events (Epstein, 2013). Families and parents are also invited and encouraged to share things about their cultures or traditions so these things can be added into the classroom or routines. Parents are also invited to attend workshops from teachers about child development in the school and home (Epstein, 2013).

#### Tools of the Mind

The Tools of the Mind curriculum ideas began in 1993 when Dr. Elena Bodrova and Dr. Deborah Leong began working together in classrooms near Denver, Colorado (Tools, 2013b). They were hoping to improve the children's ability to learn as well as teach the teachers new skills in the classroom (Tools, 2013b). Dr. Bodrova and Dr. Leong were able to create classroom activities for teachers to use there were coherently whole, meaning they activities were both compliant with theoretical framework as well as internal logic (Tools, 2013b). The Tools philosophy comes from the theories and work of Lev Vygotsky and current information about development and self-regulation in children (Tools, 2013g). Vygotsky believe in the idea of "tools of the mind" which is that just like physical tools can extend our physical abilities, mental tools can do the same thing for our mental abilities (Tools, 2013g). The hope of the Tools approach is that children will gain tools to allow them to become intentional learners and to self-regulate in the preschool and kindergarten ages (Tools, 2013g). In 1996 Dr.'s Bodrova and

Leong wrote a book on the Tools of the Mind/Vygotskian approach and how to apply this in classrooms (Tools, 2013b). The Tools of the Mind approach has grown ever since its birth in 1993 and was included in the 2013 CASEL Guide to Effective Social and Emotional Learning Programs. (Tools, 2013b)

Curriculum. Vygotsky believed that until children could learn to use their mental tools that their learning was controlled by their environment (Tools, 2013h). Only after children mastered their mental tools or abilities did they take charge of their own learning and become, as Vygotsky termed it, "masters of their own behavior" (Tools, 2013h). Vygotsky also believed that "learning leads development" (Tools, 2013h) and that scaffolding or assistance is required to help children learn new skills that are within their Zone of Proximal Development or ZPD (Tools, 2013h). Tools of the Mind teachers and classrooms strive to help children acquire the tools and skills necessary to help them become intentional learners (Tools, 2013g).

For preschoolers the Tools of the Mind curriculum center around the development of self-regulation (Tools, 2013c) or the ability to control one's impulses (Tools, 2013d). When a child is self-regulated they will act the same way if an adult is present or not (Tools, 2013d). Self-regulation is promoted in Tools classrooms by the removal of causes of unregulated behavior such as: wandering the classroom, waiting in line with nothing to do and not being able to get help (Tools, 2013d). Teachers assist in promoting self-regulation through scaffolding activities and experience for children (Tools, 2013d). Children take part in play planning where they plan their play every day, before they begin to play (Tools, 2013c). This is to promote children to act intentionally and purposefully (Tools, 2013c). Play is very important in a Tools classroom, but it is said by Tools educators that not all play is created equal (Tools, 2013d).

Mature and intentional make-believe play is crucial to the development of self-regulation of the children (Tools, 2013d). Intentional make believe play also helps children to practice delayed gratification, learn to suppress impulsive behavior, practice regulating others behavior and learn about their own actions and emotions and how to intentionally use them (Tools, 2013d). Intentional play requires children to think it through before they act it out and the more creative the play the more thinking and planning is required (Tools, 2013d). Daily activity content for Tools of the Mind preschools is required to be research-based and meet all state and national standards for literacy, math and cover all aspects of development (Tools, 2013a).

Role of Child. Children play a large role in developing their mind tools and in acquiring self-regulation (Tools, 2013d). Since intentional play is the goal children are required to think about and plan their play (Tools, 2013c). Children will daily create a play plan, with teachers, by drawing a picture or something that will help them remember what they intend to do. This is done just before they go to play in the play centers (Tools, 2013c). When conflict or arguments arise children and teachers can refer to the play plans to help resolve conflict (Tools, 2013c). Children can change plans throughout the play time as they play with others and various activities (Tools, 2013c). In addition to gaining and using mental tools children are also expected to practice self-regulating themselves and their friends throughout the day (Tools, 2013g). Children should always be engaged in meaningful play or activities while they are at school (Tools, 2013d).

Role of Teacher. Teachers are a guide to acquiring mind tools and self-regulation through the practice of scaffolding children's play and activities (Tools, 2013g). Tools teachers also help their children to learn early literacy and math skills while emphasizing cognitive thinking skills (Tools, 2013g). Teachers need understand Vygotsky's approach to education and

be able to apply scaffolding and knowing what is within a child's ZPD (Tools, 2013i). Tools teachers must be able to scaffold children in their activities by giving hints, prompts or cues and then permitting the child to do it on their own (Tools, 2013i). Teachers also need to be available to help children whenever they need it and be aware of each child's developmental needs and interests (Tools, 2013i).

Parent Involvement. Tools of the Mind educators give parents many suggestions on how they can foster their children's learning and help them gain mind tools and self-regulation (Tools, 2013g). Parents are encouraged to help their children have mature make-believe play by setting up the play, being their partner in play (Tools, 2013e) and being a play mentor to model mature make-believe (Tools, 2013f). To help support their children in acquiring self-regulation parents need to make sure that they model self-regulations and act intentionally (Tools, 2013f).0) Other suggestions given to help support self-regulation include creating an environment that is freed of distractions, telling children what to expect in new or even old situations and establishing routines (Tools, 2013f).

# **Project Approach**

The Project Approach was developed by John Dewey, his wife and other teachers during seven years from 1896-1903 at the University of Chicago (Clark, 2006). Dewey didn't like the current idea that knowledge was a fixed thing that was waiting to be discovered (Clark, 2006). Based on Dewey's ideas the Project Approach is a way of working with children to help them find deeper understandings in the world they inhabit (Clark, 2006). By using project work in curriculums children's intellectual development will improve because their minds will be engaged in observing and investigating particular aspects of their environment (Clark, 2006).

William Kilpatrick, Dewey's colleague, made the idea of the Project Approach famous after Dewey moved to Colombia University (Clark, 2006).

Curriculum. The Project Approach allows teachers to use a set of teaching strategies to help students study real world topics in-depth (Project, 2013b). The term project in this approach is used to define the investigation and learning of a real-word topic by students (Project, 2013b). The exploration of a topic may be done by whole classes or smaller groups with teachers working alongside (Project, 2013b). The Project Approach helps students to gain positive self-esteem by giving them a sense of purpose in their studies (Project, 2013d). Students gain first-hand observation and hands-on experience through their investigation of a project which helps to solidify their learning experience (Project, 2013d).

Projects are accomplished in three phases: beginning, developing and concluding (Project, 2013a). Projects are often planned out in advance, but must allow the flexibility for it to evolve with children's needs and interests (Project, 2013a). The first phase of the project children and teachers decide on a topic to investigate (Clark, 2006). In the second phase is when children explore the topic in-depth through observations and first-hand experience; children then make representations of their discoveries (Clark, 2006). Phase three brings the project to a close as students review and debrief the experience (Clark, 2006). Along with the three phases there are three important components that need to be considered in every project: content, processes and products (Clark, 2006).

Role of Child. Children are actively involved in their own learning through the Project Approach (Project, 2013b). They take part in deciding what projects to study and must bring to the table things that interest them (Clark, 2006). Students and teachers should come to feel that school is life and not that the two are separate so that application to real world can be made

(Project, 2013c). Through projects children are able to construct their own knowledge and understanding with teachers to help guide them (Project, 2013d). In phase one of a project children and teachers discuss experiences and interests over a few days to decide what topic the next project should be (Project, 2013a). Children gain understanding through hands on experiences and first hand observations in phase two (Project, 2013a). Phase three children plan and present their information to other students or teachers or even family and friends in what is called a culminating event (Project, 2013a). Children develop positive thoughts about learning and about themselves as they learn how to learn about the world and things that interest them (Clark, 2006).

Role of Teacher. Teachers are a guide and facilitator in all aspects of the classroom and especially throughout each project (Project, 2013d). Teachers and students must develop a connection with each other because teaching and learning is an interactive process (Project, 2013d). There is an extensive amount of planning on the teacher's part for projects (Project, 2013a). Teachers must have an understanding of the interests of the children as well as some personal experience with topics chosen. Teachers help children to brainstorm and discuss possible topics of study in phase one (Project, 2013a). Phase two the teachers assist with exploration and investigation by posing questions and creating opportunities for first hand observations and hands on experiences (Project, 2013a). Teachers help to tie everything together and make additional applications and connection to life and opportunities for students to share their new knowledge through the culminating event in phase three (Project, 2013a). Teachers must be aware of the content, processes for investigation and the product outcomes of each project (Clark, 2006).

Parent Involvement. Parents help support the idea the school is life and that they are not separate by helping them to make connections and apply learning to everyday life (Project, 2013d). Parents can help teachers to know what interests their children have (Project, 2013a). Parents can also extend learning of topics in the home by providing additional information or experiences for the current real world topic (Clark, 2006). Parents can attend the culminating events of phase three for each project (Project, 2013a). Parents can also play a huge role in supporting their children's understanding of topics by listening to and viewing the results of their children's investigations (Project, 2013a).

## Perfect Method

A perfect preschool method would incorporate many of the good and successful attributes of each of the aforementioned preschool methods and approaches. All of these preschools do things similarly, but many aspects are very different. Each of these schools and methods has impressive successes and accomplishments in the areas in which they are used. It is important to note that not all good aspects of each of these preschools could be implemented everywhere. Many of these methods have evolved in areas of the world based on the needs of the culture and society at the passing time. The impressive parent involvement in almost every aspect of the schools in Reggio Emilia, Italy would not be ideal to expect from busy parents in large U.S. cities or elsewhere because it has not been so in the past, as it has been in Reggio Emilia. The narrative style of teaching and learning in Waldorf, England schools might not be conducive to children whose lives and culture do not include the rich oral tradition that surround cultures of Waldorf schools. Therefore it is important to learn and apply as much information as possible about child development and learning in preschools, and many techniques and curriculum ideas that are applicable to most all. But it is important also to remember that not all techniques and

applications to teaching and learning in preschools will work universally because these can vary by society and culture.

Curriculum. For a child to develop in the best and most balance way possible the "whole" child must be seen in all their contexts. Children will be seen holistically by seeing them in their whole context including cognitive, social, cultural, physical, emotional and spiritual contexts. This approach also understands that any experience of a child will be affect by all of these contexts as well as contributing to their development. Development will be viewed individually as well as in a group or class. Each child will be met where they are at developmentally and given the guidance and help needed to improve how and where they can as individuals. Family and community will also be an essential part of the curriculum as they are to the well being of the child. Family input and good community life will help to encourage consistency throughout all facets of the child's life. It would be ideal if education is seen as not only a family and teacher responsibility but a public or community one as well.

Children will take some responsibility for their own learning and this will help to develop their own self-worth and uniqueness in life and in the world. Children are natural learners with innate curiosity, therefore learning will be child led. The curriculum, environment and all aspects of the preschool will be child centered in an attempt to foster the natural learning and curiosity of children. Teachers will be guides and children will be responsible for their own learning and interests. Hands on experiences and manipulation will be highly valued to encourage natural learning and understanding. Children will develop self awareness and self regulation through direct experiences with their peers and the world around them.

The classroom environment will be set up to encourage natural learning experiences and will be another source of learning for the children. The classroom will be arranged in a way as to

allow for easy access to materials, fluid movement and collaborations between children and organized. Shelves and tables will be sized for children and the placement of furniture and spaces will empower children's independence. There will be enough space for movement and spaces set aside for particular activities such as, but not limited to art, snack, dramatic play, blocks, science and reading. Windows will be throughout the classroom and allow for natural light and plants, paintings and pictures will also be throughout the room.

A schedule will be made and adhered to so that children can benefit from daily routine and consistency. The schedule will include time for children to choose what activities they wish to engage in as well as time for large and small groups and time for food preparation and eating. Classes will have overlying themes or projects to guide large and small group activities and themes will be based off of the children's interests and needs. Field trips and time outdoors as well as learning outside will be encouraged, required and made a priority. At the beginning of each day children will plan what activities they will engage in during self-selected time. The children will then do those activities and take time at the end of the day to review what they did and what was learned. The outdoors will play an important role in the education of the children. Time each day will be spent outside and many small and large group and learning activities will be encouraged to be in the outdoors.

Role of Child. Children will take charge of their own learning through discover and experience. Each child brings their own unique experiences, skills, needs and perceptions about the world to the classroom and all of these will come together to supplement their own learning and the learning of their peers. Children are natural learners and the classroom and teachers will allow and support the discovery of information in areas that interest each child, on their time table. Children will be allowed and aided to develop from whatever phase of development they

are in. It will be encouraged for each child to take part of activities and experiences available, but it is the child's choice to participate or not. Children will take an active role in their own learning by choosing the activities they will engage in, taking risks through discovery and experience, adhering to the rules and routines of the classroom and taking care of their own basic needs. The children will develop positive thoughts about learning as they learn about how to learn about the things that interest them.

Children will be responsible for themselves, not only their learning in the classroom but their actions and basic needs. Children will improve cognitive skills through first-hand experience through manipulations and experimentation of objects using sight, sound, taste, smell, touch and movement in various activities and materials in the room. Children will be free to move about the room and explore what interests them. Children will be expected to not intrude or hinder other children's learning, thus learning respect and pro social behavior and an understanding of community and supporting one another. Children will make their own choices about how to spend their time. They will be free to work alone or with others and can use an activity for any amount of time. This freedom to discover a variety of materials and activities will help children to develop their flexibility, imagination, self-regulation and problem solving. Language and literacy will increase as children work together; the social and cognitive skills they already have will improve. Many books will be available and place throughout the classroom, and children will be allowed to take home books of their choosing from the library.

Role of Teacher. Teachers will be partners with parents and the children in their learning. Teachers will be expected to not only know the curriculum and be up date on current child development information and teaching practices but must be adept at implementing these in the classroom. They will be thoughtful and aware of their actions and realize that they are role

models, guides and facilitators to the children. Teachers must be able to recognize learning opportunities for each child, have a connection and relationship with each child, understand where each child is at developmentally and be able to scaffold the learning of each child at their pace and timetable. Teachers must be able to see the interests of the children and provide materials and experience to best help each child develop. Teachers will understand their role as a facilitator and be able to work along-side children. This is an active role and teachers must be engaged and aware in the classroom.

A large role of the teachers will be in extending learning opportunities of the children. Each teacher must also be able to observe, asses and document the development and progress of the children. This will be done through classroom goal setting and evaluations and revisions of goals based up child needs and interests. Teacher s will plan, prepare and execute information sessions about child development for the parents. They will also meet with parents on a regular basis to maintain a flow of information about the children from home to the classroom and vice versa.

Role of Parent. Parents are a partner with teachers and children in their learning experience. Home life plays a large role in the learning experiences of each child. Parents should play a huge supportive role in their child's learning by communicating with teachers about their interests and needs as well as providing information to the child about the world around them. Parents and teachers should work together to create an image of each child, their needs, interests and developmental level to help know where each child is at developmentally. Parents should make connections about information learned in the classroom and to home or real life. Parents can also help encourage their children to make connections and relationships in their classroom. Parents will be welcome to visit the classroom at anytime and encouraged to

come on any field trips or other events. Parents and families would also be invited to share any cultures or traditions they may have.

### Conclusion

It is apparent that the education of young children is important to our communities and society. But what is even clearer is that when learning opportunities for young children are thought out, planned and executed in a way that is conducive to how children learn that real learning, understanding, growth and development can take place. If teaching and education is not done in a way that is conducive to learning, then many things can slip through the cracks, including the future learning and life of the children being taught. But the education of young children, if done well and right, can act as a springboard for their future learning and open the doors for a child's future.

It is a great thing to be a part of the real learning and growth of a child. Little in life is better than seeing the light in a child's eyes when they understand something not previously understood, make a new connection or accomplish a skill that was once unattainable. These experiences are real and each child deserves to truly learn, understand, grow and develop in a safe and supported environment at their own pace. This teaching and learning is possible, it happens in many classrooms throughout the world. As understanding of how children develop and learn grows, as well as what can be done to support such learning, then this type of classroom and teaching will contagiously spread and even more children will be able to truly learn, grow and develop appropriately.

### References

- American Montessori Society. (2013) *Montessori Classrooms*. Retrieved from http://www.amshq.org/Montessori-Education/Introduction-to-Montessori/Montessori-Classrooms.aspx
- American Montessori Society. (2013) *Introduction to Montessori*. Retrieved from http://www.amshq.org/Montessori-Education/Introduction-to-Montessori.aspx
- American Montessori Society. (2013). *Maria Montessori*. Retrieved from http://www.amshq.org/Montessori-Education/History-of-Montessori-Education/Biography-of-Maria-Montessori.aspx
- American Montessori Society. (2013) *Montessori Education*. Retrieved from http://www.amshq.org/Montessori-Education.aspx
- American Montessori Society. (2013) *Montessori Teachers*. Retrieved from http://www.amshq.org/Montessori-Education/Introduction-to-Montessori/Montessori-Teachers.aspx
- Archimedes Training. (2012). What Happens At A Forrest School. Retrieved from http://www.forestschools.com/what-happens-at-a-forest-school/
- Bankstreet School For Children. (2013). *Commitment to Diversity*. Retrieved from http://bankstreet.edu/school-children/about-sfc/diversity/
- Bankstreet School For Children. (2013). *Curriculum*. Retrieved from http://bankstreet.edu/innovation-policy-and-research/head-start/curriculum/

- Bankstreet School For Children. (2013). *History and Philosophy*. Retrieved from http://bankstreet.edu/school-children/about-sfc/our-history/
- Bankstreet School For Children. (2013). *Lower School*. Retrieved from http://bankstreet.edu/school-children/programs/lower-school/
- Bankstreet School For Children. (2013). *Mission*. Retrieved from http://bankstreet.edu/school-children/about-sfc/mission/
- Bankstreet School For Children. (2013). *The School for Children at a Glance*. Retrieved from http://bankstreet.edu/school-children/about-sfc/glance/
- Bigner, J. J. (2010). Parent-Child Relations: An Introduction to Parenting. (8<sup>th</sup> Ed.). Upper Saddle River, New Jersey. Pearson Education, Inc.
- Bredekamp, S., Copple, C. (2009). *Basics of Developmentally Appropriate Practice An Introduction of Teacher of Children 3 to 6*. (4<sup>th</sup> Ed.) Washington, DC. National Association for the Education of Young Children.
- Bredekamp, S., Copple, C. (Eds.). (2009). *Developmentally Appropriate Practice In Early Childhood Programs Serving Children from Birth through Age 8*. (3<sup>rd</sup> Ed.). Washington, DC. National Association for the Education of Young Children.
- Bronfenbrenner Center for Translational Research. (2013). *Urie Bronfrenbrenner*. Retrieved from http://www.bctr.cornell.edu/about-us/urie-bronfenbrenner/
- Cherry, K. (2013). *Lev Vygotsky Biography*. Retrieved from http://psychology.about.com/od/profilesmz/p/vygotsky.htm

- Cherry, K. (2013). Piaget's Stages of Cognitive Development Background and Key Concepts of Piaget's Theory. Retrieved from <a href="http://psychology.about.com/od/piagetstheory/a/keyconcepts.htm">http://psychology.about.com/od/piagetstheory/a/keyconcepts.htm</a>
- Ceci, S. J. (2005, November). *In Appreciation: Urie Bronfenbrenner*. Retrieved from http://www.psychologicalscience.org/index.php/uncategorized/in-appreciation-urie-bronfenbrenner.html
- Clark, A. (2006). Changing Classroom Practice to Include the Project Approach. Retrieved from http://ecrp.uiuc.edu/v8n2/clark.html
- Culatta, R. (2011). Zone of Proximal Development. Retrieved from http://www.innovativelearning.com/educational\_psychology/development/zone-of-proximal-development.html
- DeVries, R., Kohlberg, L. (1987). *Programs of Early Education: A Constructivist View*.

  Madison, Wisconsin. National Association for the Education of Young Children.
- Epstein, A. S. (2013). *All About HighScope-FAQs*. Retrieved from http://highscope.org/Content.asp?ContentId=291
- Epstein, P., Seldin, T. (2010, August 3). *The Montessori Way*. Retrieved from http://montessori.org/index.php?option=com\_content&view=article&id=282:brief-answers-to-questions-parents-often-ask&catid=7:faqs&Itemid=25
- Henniger, M. L. (2010, July 20). *Basis of the High/Scope Curriculum*. Retrieved from http://www.education.com/reference/article/basis-high-scope-curriculum/
- HighScope Educational Research Foundation. (2013). *Curriculum*. Retrieved from http://highscope.org/Content.asp?ContentId=1

- HighScope Educational Research Foundation. (2013). *HighScope for Parents*. Retrieved from http://highscope.org/Content.asp?ContentId=746
- HighScope Educational Research Foundation. (2013). *HighScope for Teachers*. Retrieved from http://highscope.org/Content.asp?ContentId=744
- HighScope Educational Research Foundation. (2013). *How We Evaluate-Assessment*. Retrieved from http://highscope.org/Content.asp?ContentId=371
- HighScope Educational Research Foundation. (2013). *How We Teach*. Retrieved from http://highscope.org/Content.asp?ContentId=171
- HighScope Educational Research Foundation. (2013). *Preschool*. Retrieved from http://highscope.org/Content.asp?ContentId=63
- HighScope Educational Research Foundation. (2013). *Preschool Key Developmental Indicators* (KDIs). Retrieved from http://highscope.org/Content.asp?ContentId=566
- Hohmann, M., Weikart, D. P. (1995). Educating Young Children: Active Learning Practices for Preschool and Child Care Programs. Ypsilanti, Michigan. High/Scope Press.
- Kenny, R. (2010, March 31). Forest School and the Early Years Foundation Stage An

  Exploratory Case Study. Retrieved from

  http://www.academia.edu/666361/Forest\_School\_and\_the\_Early\_Years\_Foundation\_Stage\_-\_An\_Exploratory\_Case\_Study
- MariaMontessori.com. (2013). *This is not a school. At least in a traditional sense*. Retrieved from http://mariamontessori.com/mm/?page\_id=457
- Mays, R., Nordwall, S. (2013). What is Anthroposophy. Retrieved from http://www.waldorfanswers.com/Anthroposophy.htm

- New Zealand Ministry of Education. (2009, September 29). *Te Whariki*. Retrieved from http://www.educate.ece.govt.nz/learning/curriculumAndLearning/TeWhariki.aspx
- North American Reggio Emilia Alliance. (2013). *History*. Retrieved from http://www.reggioalliance.org/reggio emilia italy/history.php
- North American Reggio Emilia Alliance. (2013). *Mission and Goals*. Retrieved from http://www.reggioalliance.org/narea/background/goals\_and\_mission.php
- North American Reggio Emilia Alliance. (2013). *Related to Reggio Emilia Philosophies and Experiences*. Retrieved from http://www.reggioalliance.org/faq.php#meaning-languages
- Project Approach. (2013). *Planning*. Retrieved from http://www.projectapproach.org/planning.php
- Project Approach. (2013). *Project Approach*. Retrieved from http://www.projectapproach.org/project approach.php
- Project Approach. (2013). *Special Topics*. Retrieved from http://www.projectapproach.org/special\_topics.php
- Project Approach. (2013). Theory. Retrieved from http://www.projectapproach.org/theory.php
- Reggio Children. (2013). *The Reggio Emilia Approach*. Retrieved from http://www.reggiochildren.it/identita/reggio-emilia-approach/?lang=en
- Rider, E.A., Sigelman, C.K. (1998). *Lifespan Human Development*. (7<sup>th</sup> Ed.). Belmont Drive, California. Wadsworth.
- Steiner Waldorf Schools Fellowship. (2013). *Early Years in Steiner Education*. Retrieved from http://www.steinerwaldorf.org/earlyyears.html

- Steiner Waldorf Schools Fellowship. (2013). Frequently Asked Questions. Retrieved from http://www.steinerwaldorf.org/faqs.html
- Steiner Waldorf Schools Fellowship. (2013). *Teaching*. Retrieved from http://www.steinerwaldorf.org/teaching.html
- Steiner Waldorf Schools Fellowship. (2013). What is Steiner Education. Retrieved from http://www.steinerwaldorf.org/whatissteinereducation.html
- Stroum Jewish Community Center. (2013). Reggio Emilia Approach and Curriculum. Retrieved from
  - http://www.sjcc.org/index.php?src=gendocs&ref=ReggioEmiliaPhilosophyandCurriculu m&category=early\_childhood
- Tools of the Mind. (2013). *Curriculum*. Retrieved from http://www.toolsofthemind.org/curriculum/
- Tools of the Mind. (2013). *History*. Retrieved from http://www.toolsofthemind.org/about/history/
- Tools of the Mind. (2013). *Preschool*. Retrieved from http://www.toolsofthemind.org/curriculum/preschool/#top
- Tools of the Mind. (2013). *Self-Regulation*. Retrieved from http://www.toolsofthemind.org/philosophy/self-regulation/
- Tools of the Mind. (2013). Supporting Make-Believe Play. Retrieved from http://www.toolsofthemind.org/parents/make-believe-play/
- Tools of the Mind. (2013). *Supporting Self-Regulation*. Retrieved from http://www.toolsofthemind.org/parents/self-regulation/

- Tools of the Mind. (2013). *Vygotskian Approach*. Retrieved from http://www.toolsofthemind.org/philosophy/vygotskian-approach/
- Tools of the Mind. (2013). *Zone of Proximal Development and Scaffolding*. Retrieved from http://www.toolsofthemind.org/philosophy/scaffolding/
- Tree Jumpers. (2013). *History Theory and Benefits*. Retrieved from http://www.treejumpers.com/forest-schools-in-kent/history,-theory-benefits.aspx
- Victor Valley College. (2013,September 17). Bronfenbrenner's Microsystems and Mesosystems.

  Retrieved from

http://www.vvc.edu/academic/child\_development/droege/ht/course2/faculty/lecture/cd6le ctmicro.html