

**THE IMPORTANCE OF EARLY CHILDHOOD EDUCATION:
Roles of Play, Language, Socialization, Formation of Values**

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Robert Nance

Opening Remarks

How many Maestros does it take to change a light bulb? No one knows, because no one has ever bothered to watch. Though rare, I admit there have been times when in front orchestra or chorus that my gyrations on the podium in serious musical pursuit have served little more purpose than the utility of a fan to keep the performers cool.

Today, however, my purpose is rather more important. I want to assure you all that I am not a figment of your imagination; that I am indeed here to deliver my January 30th speech on the importance of early childhood education. Since this paper has been rescheduled a couple of times this year, I feel a bit like a check drawn on the Federal Government's check register – made of rubber with a bounce that will keep us all wondering when and where it will land. For your forbearance and cooperation, I am grateful - it has been a significantly robust and busy year for me as teacher and performer and the flexibility afforded me by the change in schedule has been a blessing.

I confess that when the subject of my quest was given, shock came over me. The subject has been considered and studied for no less than 5000 years (and probably more), many colleagues in education have spent years advocating for and defending the cause, and the thought of addressing the importance of childhood education for the 5000 and 1st year caused my reasonably healthy body to convulse uncontrollably, writhing in a Tourette-like episode as it released a single syllabic, colloquial explicative: DUH.

Alas, I accept that something as commonplace as childhood education easily passes from focus, giving way to the ever-present emergency that is salient in the minds of the general population, and, therefore short-changed if not for nagging advocates who understand and remain focused on the subject.

So, here I am...I have accepted my quest....and I feel good about it! Let's get started.

THE IMPORTANCE OF EARLY CHILDHOOD EDUCATION: Roles of Play, Language, Socialization, Formation of Values

Introduction

*“Give me the children until they are seven and anyone may have them afterwards.”—
Francis Xavier¹*

“Education is too important to be left solely to educators” – Francis Keppel²

“All I really need to know, I learned in Kindergarten” – Robert Fulghum³

*“You cannot teach a man anything; you can only help him find it within himself”—
Galileo Galilei⁴*

“I have never let my schooling interfere with my education” – Mark Twain⁵

These simple statements by Jesuit priest Francis Xavier, American educator Francis Keppel, author Robert Fulghum, the Italian scientist Galilei, and American humorist Mark Twain, bring simplicity and substance to the quest I have been assigned. The subject matter is not without controversy and political ramifications, particularly when students in the United States consistently fall well below the math and science capabilities of students in other countries⁶ and ever increasing social ills have forced communities to focus on the fundamentals of what makes a good citizenry. Essentially, nothing is as good at preventing social ills, and creating a positive and productive society as good parenting and purposeful early childhood education.⁷

Two recent developments have stimulated growing public discussion about the right balance between individual and shared responsibility for that strong foundation. The

first is the explosion of research in neurobiology that clarifies the extent to which the interaction between genetics and early experience literally shapes brain architecture.⁸ The second is the increasingly recognized need for a highly skilled workforce and a healthy adult population to confront the growing challenges of global economic competition and the rising costs of Social Security, Medicare, and Medicaid for the aging baby boomers.⁹

I admit that I am rather cynical about the far too complex, unfocused and overly therapeutic educational methodologies oft employed to purportedly protect our children's self-esteem, which has fostered a degree of ignorance and neurosis that is unprecedented. We have, in my view, ventured far beyond the substance of education and focused more on the method. It is well past time to get back to basics. Children need exposure to fundamentals and lots of activities in which to discover the world about them.

It is clear from anecdotal, neurobiological, and behavioral perspectives that human beings' basic personality, intellect, and 'formation of values' or character are fundamentally formed by age seven. If you accept this evidence, then you understand that nurturing children during these formative years dictates their future success or failure. My own experience informs me that this is abundantly true and several hundred years of research has underscored that truth; thus, it is beyond me why an effective focus of community resources on early childhood education still needs to be studied, least of all justified.

Regardless of methodology, the most important thing is to concentrate efforts on this age group. Present day ills underscore this priority. We must cultivate and employ highly qualified instructors to teach our children. We must hold our civic leaders

accountable for staying focused on the active education of our children and not for funding another study about education. And we must foster an attitude of communal responsibility, where parents, teachers, and the community hold joint responsibility for the nurture of our children.

Theories of Learning & Historical Context

To best illuminate the subject of early childhood education, one needs to understand the fundamental theories of learning. There are three main theories: Behaviorism, Cognitivism, and Constructivism.

Behaviorism focuses on the objectively observable aspects of learning, that learning is manifested by a change in behavior, that environment shapes behavior and principals of contiguity and reinforcement are central to explaining the learning process. For Behaviorists, learning is the acquisition of new behavior through conditioning. Parents, for example, start out as behaviorists using both Classical conditioning where behavior becomes a reflex response to stimulus (e.g. Pavlov's dogs) and Operant conditioning where there is reinforcement of behavior by reward or punishment.

Cognitive theories look beyond behavior to explain brain-based learning. Cognitivists consider how human memory works to promote learning. Basic cognitive theory states that 1) the memory system is an active organized processor of information and 2) that prior knowledge plays an important role in learning. For Cognitivists, the locus of control over the learning processes lies with the individual learner, rather than with the environment as Behaviorists believe.

Constructivism views learning as a process in which the learner actively constructs or builds new ideas or concepts based upon current and past knowledge. Simply put, learning involves constructing one's own knowledge from one's own experiences. Constructivist learning, therefore, is a very personal endeavor, whereby internalized concepts, rules and general principles may consequently be applied in a practical real-world context. This is also known as 'social constructivism', where knowledge is constructed when individuals engage socially in talk and activity about shared problems or tasks.

Educational philosophy can be traced back to Greek Philosopher Socrates, his disciple Plato and Plato's student, Aristotle.

Socrates was the first to suggest that when one realizes that he does not know anything, he starts to gain knowledge. He initiated the dialectic method in which students are prompted to think independently by the use of questions. Socrates maintained that ideas exist in the minds of the students, that the teacher must help bring those ideas to the surface. For this point of view, Socrates can rightly be called a Cognitivist.

Plato held a slightly different view. For him, ideas were a reality, which do not exist in the mind of the man but in the Prime Mover (God). He proposed the idea of universal education and maintained that the state should provide for it. He believed in personal virtue – a balance of emotions, desire and reason – and social justice – harmony among the social classes. Famed for the quote, "a sound mind can exist only in a sound body," he advocated for physical education. Though stemming from Cognitivism, I feel Plato's view to be more in line with Behaviorism.

Plato's student Aristotle believed in observation and experience to be the means of gaining knowledge. Aristotle is, in my view, a Constructivist. This is the concept upon which modern science, philosophy and education springs.

The Greek philosophic triune has served as inspiration for many educators, two of whom I would like to highlight: Friedrich Froebel and John Dewey.

German educator Friedrich Froebel lived from 1782-1852 and is famed for his then radical insight that a child's early learning experiences are critical to their later educational achievements and to the health and development of society as a whole. He devised a set of principles and practices which would form part of an interactive educational process to take place in educational institutions that, in 1840, he named 'kindergarten.'

American educator John Dewey, who lived from 1859-1952, believed that there were only two natural guides for human beings to reach out to the 'Ultimate Truth.' These guides are science and democracy. Dewey's work laid strong foundations for Social Constructivism in this country, where it has become generally accepted that teachers and curriculum should be designed to allow for the individual differences and needs of the learners. Like Froebel, Dewey also laid the foundation for the generally accepted practice of activity-based learning.

Early Childhood Education

According to the National Association for the Education of Young Children, "early childhood education" concerns the education of children from birth to age eight, and is considered to be the most vulnerable stage of a person's life.

Infants and toddlers experience life more holistically than any other age group. Social, emotional, cognitive, linguistic and physical lessons are NOT learned separately by very young children. The most effective teachers for this age group are adults who understand their holistic approach. Researchers and educators in the field of early childhood education view all adults in a child's life (parents, families, educators) to be an integral part of the educational process.¹⁰

Much of childhood educational methodology today stems from the work of one particular researcher, that of Swiss philosopher and natural scientist Jean Piaget (1896-1980) whose research on the "Stages of Cognitive Development" helped to create a variety of age-appropriate learning methodologies. According to Piaget, there are four major stages of cognitive development: 1) the **Sensorimotor stage**, which occurs from birth up to 2 years of age, during which time learning is based primarily on physical interaction and experiences; 2) the **Preoperational Stage**, which occurs between 2 and 7, during which time intelligence is increasingly demonstrated through the use of symbols, memory and imagination develops as language use matures, thinking is non-logical, nonreversible and egocentric; 3) the **Concrete Operations Stage**, occurring between 7 and 12, during which intelligence is demonstrated through logical and systematic manipulation of symbols relating to concrete objects, and thinking is operational, reversible and less ego-centric; and 4) the **Formal Operations Stage**, taking place from age 12 and beyond, where intelligence is demonstrated through the logical use of symbols related to abstract concepts, thinking is abstract, hypothetical and initially very ego-centric.¹¹

Instructional Models

Early childhood education takes many forms, depending on the educational approach and theoretical beliefs of the adults in a child's realm of experience. Examples include the Montessori Method, Direct Instruction, the Bank Street Developmental-Interaction approach, the High/Scope Curriculum, the Kamii-DeVries constructivist approach, and the Waldorf Method.

The Montessori Method

The Montessori Method is a child-centered educational method, based on theories of child development originated by Italian educator Maria Montessori (1870-1952) in the late 19th and early 20th centuries. It is applied primarily in preschool and elementary school settings although some Montessori high schools exist. The Montessori Method is characterized by an emphasis on self-directed activity on the part of the child and clinical observation on the part of the teacher (often called a director or guide). It stresses the importance of adapting the child's learning environment to his or her developmental level, and of the role of physical activity in absorbing abstract concepts and practical skills. It is also characterized by the use of autodidactic (self-correcting) equipment for introduction and learning of various concepts.¹²

The basic Montessori concepts are 1) The teacher must pay attention to the child, rather than the child paying attention to the teacher; 2) The child proceeds at his own pace in an environment controlled to provide a means of learning; 3) Imaginative teaching

materials are the heart of the process. 4) Each of them is self-correcting, thus enabling the child to proceed at his own pace and see his own mistakes.

If you were to look inside a Montessori classroom, you would get the impression of "controlled chaos" because each child would be quietly working at his private encounter with whatever learning task he or she chose.

Students are separated into three age categories: 1) age 2 ½ years; 2) children from 2 ½ to 6 years old; and 3) ages 6 to 12 years. The students learn through activities that involve exploration, manipulations, order, repetition, abstraction, and communication. The teacher is to encourage children in the first two age groups to use their senses to explore and manipulate materials in their immediate environment. Children in the last age group deal with abstract concepts based on their newly developed powers of reasoning, imagination, and creativity.

Direct Instruction

In contrast to the Montessori Method, Direct Instruction (DI) is a model for teaching that emphasizes well-developed and carefully planned lessons designed around small learning increments and clearly defined and prescribed teaching tasks. It is based on the theory that clear instruction can greatly improve and accelerate learning.

Direct instruction focuses on academics, specifically the content of intelligence and achievement tests. In Direct Instruction, teachers lead small groups of children in precisely planned 20-minute question-and-answer lessons in language, mathematics, and reading. The classroom is kept free of distracting materials and is a teacher-centered model.¹³

Bank Street Developmental-Interaction approach

Bank Street's Developmental Interaction Approach is based on the theories of Jean Piaget, Erik Erikson, John Dewey and Lucy Sprague Mitchell, among others. The Developmental Interaction Approach stresses that the optimal educational process maximizes children's direct and rich interactions with a wide variety of materials, ideas and people in their environment. The approach aims for actively involving children in acquiring competence. Choice, active investigation, independent pursuit and learning through discovery are dominant components of this method.¹⁴

High/Scope Curriculum

High/Scope was established in 1970 by Dr. David P. Weikart, who started the organization to continue research and program activities he originally initiated as an administrator with the Ypsilanti Public Schools. High/Scope's educational research on preschool education has had an important impact on public policy, contributing to the continuation of the national Head Start program and other educational programs for young children.

The High/Scope Preschool Curriculum is an open-framework model derived from Piaget's theories. The curriculum originated from one of the first early childhood intervention programs of the 1960s, the High/Scope Perry Preschool Project. Through designated key experiences for children, teaching and parenting strategies, and child-observation materials, the curriculum provides a decision-making framework. Within this

framework, teachers design a classroom program that reflects the expressed needs and interests of the children being served.¹⁵

Kamii-DeVries constructivist approach

The Kamii-DeVries Constructivist approach was developed by Constance Kamii and Rheta DeVries in 1980. It is based on Piaget's constructivist principle that children develop their knowledge, intelligence, morality, and personality from their interactions with the world within a logical-mathematical framework. Physical activity provides a vehicle through which children learn through mental action. A child-centered approach is used by teachers who are well grounded in traditional early childhood education. Teachers prepare the setting for active learning, remain in touch with what children are thinking, respond to children on their perspective, and help children extend their ideas.

The Waldorf Method

The **Waldorf method** is a concept of education developed by Rudolf Steiner in Europe in the 1920s. Today there are more than 500 Waldorf schools worldwide and more than 100 Waldorf schools in the United States. The aim of Waldorf education is to educate the whole child—head, heart, and hands. The curriculum is geared to the child's stages of development and brings together all elements of development—intellectual, artistic, spiritual, and movement. The curriculum is designed for children from preschool through high school. For the Waldorf student, music, dance, and theater, writing, literature, legends and myths are not simply subjects to be read about, ingested and tested.

They are experienced. Through these experiences, Waldorf students cultivate a lifelong love of learning as well as the intellectual, emotional, physical and spiritual capacities to be individuals certain of their paths and to be of service to the world.¹⁶

Never Mind the Method: Let's Just Play

Several years ago, Quest Club (at my suggestion) invited as guest speaker Dr. Al Gini, professor of philosophy at Loyola University in Chicago. In his book, The Importance of Being Lazy, he focuses on how adults' lack of leisure time actually inhibits productivity, joy and being 'in touch' with life in general. Why this lack of emphasis on play as we grow older is a curious one, especially when one considers the adage, "...all work and no play makes Jack a dull boy." If it's not good for human beings in adulthood, can it be good for our children? Not in the least; in fact, children are far, far less productive when their playtime is inhibited or curtailed.

Anthony Pellegrini, professor of early childhood education at the University of Minnesota, suggests that we should allow our children significant amounts of playtime and avoid overprotecting them from the wide-ranging emotions and social hazards they experience during play. Child development experts like Pellegrini have found that play is crucial to the overall development of children's emotional, intellectual and social skills. Play is how children experience fun and joy, develop their personalities and a positive sense of self, realize their potential and experience success. Play unlocks children's creativity and imagination, and develops reading, thinking and problem solving skills as well as motor skills. When children play, they process and manage emotions, understand

and interpret the world around them, learn relationship and social skills, and develop values and ethics.¹⁷

Play feeds the brain, helping it develop in ways critical to success in life. During play, one develops a foundation for learning including language, reading, thinking and reasoning skills. And play between parent and child provides important opportunities for parent-child bonding.

Dr. Edgar Klugman, Professor Emeritus at Wheelock College, Boston, one of the foremost experts in play, identifies the different categories of play¹⁸ as follows: 1) **Functional Play**, when the child enjoys repetitive play with objects and gains motor and practice skills; 2) **Constructive Play**, where the child creates or makes something and solves problems, and in the process develops skills such as reasoning, problem solving, and creativity; 3) **Pretend Play**, when children transform themselves, others, and objects from real into make-believe, which helps them process emotions and events in their lives, practice social skills, learn values, develop language skills, and create a rich imagination; and 4) **Games with Rules Play**, which involves pre-set rules such as board games, ball games, chanting, and skipping games. Through this type of play children learn and practice cooperation, mutual understanding, and logical thinking.

On the National Public Radio program, *Morning Edition*, February 21, 2008, Alix Spiegel produced a timely report entitled “Old Fashioned Play Builds Serious Skills.” Spiegel reports that in the 1950’s there was a shift from using the imagination for play time to focusing on toys for play. Instead of spending time in autonomous shifting make-believe, children were supplied with ever more specific toys for play with pre-determined

scripts. The reduction in make-believe time has stunted the cognitive and emotional development of several generations, reducing children's ability to self-regulate their behavior and think creatively.¹⁹

The Alliance for Childhood, located in College Park, Maryland, promotes policies and practices that support children's healthy development, love of learning and joy in living. In their resource entitled, "Time for Play, Every Day: it's fun and fundamental" a particular question caught my attention. "What's the smartest thing a young child can do with a computer or TV? – Play with the box it came!" Where the TV or computer is pre-programmed to entertain and occupy the mind, an empty box becomes a cave, a canoe, a cabin, a candy shop – whatever the child wants, as his or her imagination dictates.

Essentially, there is ample evidence that, regardless of educational methodology, PLAY is the best way for children to develop, exercise and experience foundational life-skills and should be a significant feature of all curricula.

Funding of Early Childhood Education

Cost of early childhood education is significant. My cursory review of the data from the Bureau of Labor and Statistics shows that we are spending approximately \$350 billion dollars annually for preschool, kindergarten and elementary school education (not including special education). The US Department of Education and the US Department of Health and Human Services report that, as of 2002, roughly \$16 billion dollars was in direct funding for targeted programs, including Head Start, Social Services block grants and other services for the underserved and economically challenged.

In 2004, a special conference was conducted by the MIT Workplace Center and the Legal Momentum Family Initiative for purposes of studying the “Economic Impacts of Child Care and Early Education.”²⁰ Their findings show that for every dollar spent on Early Childhood Education the taxpayer saves \$13 in public education, criminal justice, and welfare costs over the next 20 years, which exceeds the rate of return on most other economic development programs. Therefore, investing in early childhood education, makes good sense overall, providing excellent economic activity and reduced costs to the community.

Though more research is warranted, from what I’ve seen of the data and witnessed in the field, I believe there is the need to increase salaries for pre-school teachers, which as a group is paid significantly less than teachers in kindergarten or elementary school. I would also suggest a simplification of funding by 1) concentrating the bulk of available funds on raising the salaries of teachers to attract better teachers, 2) eliminating all tenured systems for teachers, 3) cease all funding of case studies and consultants, and 4) institute a formula that balances the funds for education weighing on the side of the human element and less on buildings and systems.

Conclusion

The future of any society depends on its ability to foster the health and well-being of the next generation. Stated simply, today's children will become tomorrow's citizens, workers, and parents. When we invest wisely in children and families, the next generation will pay that back through a lifetime of productivity and responsible citizenship. When we fail to provide children with what they need to build a strong foundation for healthy and productive lives, we put our future prosperity and security at risk.

For me, the best instructional methods will keep it simple:

- 1) teach the fundamentals,
- 2) be sensitive to cultural differences,
- 3) employ the arts and physical activity,
- 4) teach to the child,
- 5) expect them do the work, and
- 6) let them play!

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- 3) Brown, Michael. The Developing Brain. Oxford University Press, Oxford, 2001.
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- 4) Ginsburg, Kenneth R. (2007). *The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds*. American Academy of Pediatrics, Clinical Report, January 2007.
- 5) Smith PK, Pellegrini A. Learning through play. In: Tremblay RE, Barr RG, Peters RDeV, Boivin M, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2008:1-6. Available at: <http://www.child-encyclopedia.com/documents/Smith-PellegriniANGxp.pdf>. Accessed January 2009.

General Website Resources

- 1) National Institutes of Health, www.nih.gov
- 2) United States Department of Education, www.ed.gov
- 3) High Scope www.highscope.org
- 4) Montessori School Foundation, www.montessori.org
- 5) International Montessori School, www.montessori.edu
- 6) National Association for the Education of Young Children, www.naeyc.org
- 7) Center on the Developing Child, Harvard University, www.developingchild.net
- 8) American Academy of Pediatrics www.aap.org
- 9) Bureau of Labor and Statistics, www.bls.gov
- 10) Encyclopedia Britannica, www.britannica.com

Endnotes

- ¹ Francis Xavier, a Spanish Basque religious leader, Jesuit priest, missionary saint, & apostle to India (1506 – 1552)
- ² Francis Keppel (April 16, 1916–February 19, 1990) was an American educator. As U.S. Commissioner of Education (1962–1965) he was instrumental in developing the Elementary and Secondary Education Act of 1965 and in overseeing enforcement of the Civil Rights Act of 1964 in the schools. In 1966, he became head of the General Learning Corporation. Keppel later served on the New York City Board of Higher Education (1967–1971) and on Harvard's Board of Overseers (1967–73). In 1974 he became founding chairman of the Lincoln Center Institute and director of the education policy program at the Aspen Institute.
- ³ Robert Fulghum (b1937), American author and musician; currently resides in Seattle, Washington.
- ⁴ Galileo Galilei (1564-1642) Italian physicist and astronomer
- ⁵ Mark Twain (1835-1910) American writer.
- ⁶ TIMMS testing as referenced by the National Center for Education Statistics
- ⁷ *The Science of Early Childhood Development* (2007) Center on the Developing Child, Harvard University, www.developingchild.net
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- ⁹ National Scientific Council, Harvard University.
- ¹⁰ US Department of Health and Human Services, www.acf.hhs.gov
- ¹¹ "Piaget, Jean." Encyclopædia Britannica. 2008. Encyclopædia Britannica Online. 3 Nov. 2008
- ¹² Montessori Foundation, www.montessori.org
- ¹³ National Institute for Direct Instruction, Eugene, OR, www.nifdi.org
- ¹⁴ www.bankstreet.edu; also reference from the New Jersey Department of Education review of the method
- ¹⁵ High/Scope Educational Research Foundation, Ypsilanti Michigan, www.highscope.org
- ¹⁶ Association of Waldorf Schools of North America, www.awsna.org
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- ¹⁹ Spiegel, Alix. "Old-Fashioned Play Builds Serious Skills" – report February 21, 2008. www.npr.org
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