

Andrews University
School of Education

MY BELIEFS ABOUT LEARNING
LEADERSHIP REFLECTION PAPER

Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Philosophy

By
Pamela C. Forbes
October 2011

Contents

Introduction.....	3
I. My Beliefs about Learning	4
Overview.....	4
Figure 1: Zone of Proximal Development (Sincero, 2011)	5
Figure 2: Model of synaptic changes after visual stimulation (Aizenman & Cline, 2007)	5
II. Timeline of Educational Theorists.....	6
Table 1: Timeline of Educational Theorists.....	6
Table 2: My Beliefs about Learning, the Experts, and My Competencies	7
III. Learning Involves the Whole Person	8
The Body.....	8
The Mind and Spirit	8
Everyone Can Learn	9
Industrial Age Needs Verses 21 st Century Needs	10
Discovering Talent.....	11
Table 3: My View of How Learning Relates to the Whole Person	12
IV. What Learning is Not.....	12
Table 4: My Belief What Learning is Not	15
V. Ethics and Personal Development	15
VI. Social Systems	17
VII. Summary/Conclusion.....	18
References.....	21

Introduction

This reflection paper explains my beliefs about learning and the competencies listed below have helped form my beliefs about education today.

Competency 1: An effective teacher/mentor

- a. Skills in using, evaluating, and adapting learning materials to accommodate individual variability.
- b. Skills in various learning strategies, including group processes.
- c. Skills in mentoring

Competency 6: A competent scholar

- a. Working knowledge of ethics and personal/professional development
- c. Working knowledge of learning and human development
- e. Working knowledge of social systems, including family dynamics, community structures, and global development

Competency 4: A collaborative consultant with . . .

- b. Skills in evaluation and assessment

In Section I of this paper, I briefly explain my belief about learning being both developmental and experiential. Section II, lists my beliefs about learning along with what the experts say to support those beliefs. I share some possible applications for facilitating this kind of learning and include my corresponding Leadership Competencies. There is also a timeline of educational theorists. Section III discusses how learning involves the whole person; body, mind, and spirit. The 21st century needs, working from strengths, and the belief that everyone can learn is part of this discussion. Section IV addresses practices in education that I believe have no educational value. Section V discusses ethics and personal and professional development. Section VI contains some information about how social systems affect learning and behavior. The last section is a summary and conclusion of this reflection paper.

I. My Beliefs about Learning

Overview

In my mind, learning is both developmental and experiential. To some extent, I agree with Piaget's philosophy that children's development precedes their learning (Piaget & Inhelder, 2000). Because it makes sense that a child must have the physical capacity to hold a pencil before learning to write, I must conclude there is validity in Piaget's theory. However, I also have to agree with Vygotsky (Daniels, 1996) and his *Zone of Proximal Development* (**Figure 1**) where he stresses the fundamental role of social interaction in the development of cognition. Once a child can physically hold a pencil, the guidance of someone who understands how to hold the pencil and form letters correctly are an important part of the experiential learning. While developmental and experiential learning is distinctly different, in my opinion, saying that learning is more about one than the other would be like saying that gardening is only about preparing the soil or only about planting and nurturing seeds. They are both critical in producing quality results.

However, I would say that really the two different perspectives are actually dependent upon the other. Once a child's physical development is ready I believe that learning takes on a special relationship between development and experience. It becomes an upward spiral where experience depends on development and development depends on experience. It can be difficult, if not impossible, to determine where one ends, and the other begins. Zull (2002, p. 112), in his book *The Art of Changing the Brain*, defends my point well when he states, "the knowledge in our minds consists of neuronal networks in our brains, so if that knowledge is to grow, the neuronal networks must physically change" (**Figure 2**). For discussion purposes in the remaining dialogue of this paper, I take the position that while both developmental and

experiential learning overlap, more of the discussion about learning will involve experience than development.

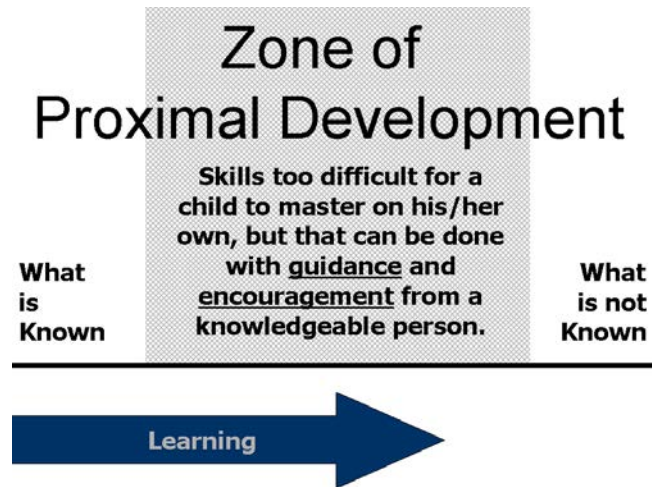


Figure 1: Zone of Proximal Development (Sincero, 2011)

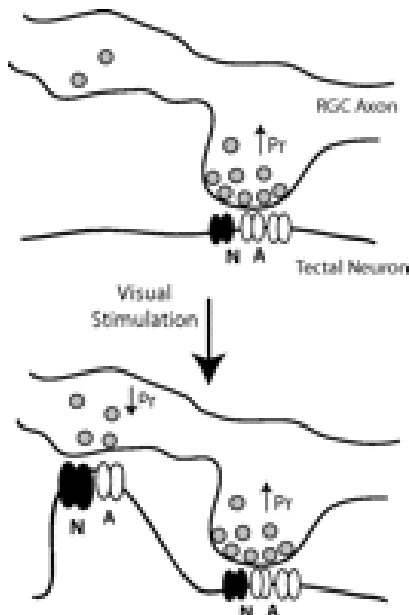


Figure 2: Model of synaptic changes after visual stimulation (Aizenman & Cline, 2007)

II. Timeline of Educational Theorists

I have found it interesting to note the time in which significant theorists have lived. In **Table 1**, I show a timeline of their lives along with their contribution to educational understanding. While much began with Dewey, It helps me to see a picture of how their lives might have overlapped and influenced each other’s theoretical thoughts. What has surprised me is that some bridge the time span into the present and are still alive today. All have lived in close proximity to each other over the last one-hundred and fifty years.

1850	1875	1900	1925	1950	1975	2000
1859-1952		John Dewey: Hands-on experiential Learning				
		1915 – Present. Jerome Bruner.		Theory of cognitive growth through environmental and experiential factors.		
1896 -1980		Jean Piaget: Children’s development precedes				
1896-1934 - Lev Vygotsky: Social interaction for the development of cognition				1950s – Present Robert Slavin:		
				1950s – Present Johnson & Johnson:		
				1950s – Present David Kolb: Learning is a spiral of four elements		

Table 1: Timeline of Educational Theorists

In **Table 2** on the next page, I have listed my basic beliefs about learning along with some names of theorists and authorities that support that belief. In the last column, I have provided the competency numbers that correlate with and each belief affects. The competencies in bold represent the core competencies presented in this paper. The competencies in parenthesis are inferred in this reflection and will receive more attention in another paper. I ask you, the reader, to make a mental note that this is my *present* position and belief but tomorrow it may change, broaden, and/or grow as I learn and discover new things.

My Beliefs About Learning Chart			
My Beliefs about Learning & Teaching	Theorists / Authorities	Applications	Competencies
Learning is a natural cycle that correlates with a physical cycle in the brain.	Kolb – Natural cycle Zull – Physical cycle in brain McCarthy – 4MAT	4MAT model	1a, 1b, 6c (2a, 2b)
Most leaning is social	Johnson & Johnson, Slavin – Cooperative Learning Kagan – CL methods Vygotsky – Zone of Proximal Development	Cooperative Learning methods Teaching Values Methods <ul style="list-style-type: none"> • Eithor/Or • Continuum • Voting • Dilemma • Discussion <i>*See “Building Learning Communities Reflective paper in 1a.”</i>	1a, 1b, 6c (3a, 4a, 4b)
Everyone can learn	Zull - Physical change in brain Vygotsky - Zone of Proximal Development	Cooperative Learning methods 4MAT model ECRI (Exemplary Center for Reading Instruction) <i>*See “Advanced Methods for Reading and Language Arts” 1b.”</i>	1a, 6e (4c, 6b, 6d)
Learning is a continuum that occurs over time. Specific information cannot be effectively confined to a particular age. Grade levels interrupt actual continuum of learning and can cause gaps to occur in a student’s learning.	Vygotsky - Zone of Proximal Development John Dewey – Experiential learning	4MAT model Teaching Values Methods <ul style="list-style-type: none"> • Eithor/Or • Continuum • Voting • Dilemma • Discussion 	6c, 6e (3a, 6b, 6d,
Learning leads the student to discover, understand, and develop his/her Creator-given talents. Learning should focus on strengths, not weaknesses.	Vygotsky - Constructivism, Ken Robinson, Ken Tucker, Marcus Buckingham - Strength-based performance	Cooperative Learning methods 4MAT model Strengths-based performance	1c (2b)
Most information will categorize in two basic groups. Each requires different methods for learning success. Categories: Procedural, Factual, Conceptual	Marzano – Dimensions of Learning (Robert J. Marzano & Kendall, 2008) (Andersin et al., 2001)	Dimensions of Learning Mnemonics Pictorials Mind Maps	1a, (2a, 2b)
For children, learning is developmental to a point.	Jean Piaget - focuses on development in children	Developmental appropriate instruction	6c
Learning is situational and dependent upon need. – there must be a reason.	Kolb - Natural cycle McCarthy – 4MAT	Cooperative Learning methods 4MAT model	1a, 4b (4a, 4c)
There must be time for practice/reflection.	Reid – Model, Prompt, Practice McCarthy – 4MAT	Reflection Processing 4MAT model	<i>*See “My Ethical Philosophy” 6a”</i> 1a, 1b, 1c, 6a (2a, 2b)
There are many intelligences which IQ tests do not measure.	Gardner – Multiple Intelligences Standaford Binet - IQ	4MAT model Learning / mind styles	1a (5a)
Standardized testing can be dangerous.	Standaford Binet – IQ Diane Ravitch – has concerns about NCLB	Criterion-based tests Performance-based tests	6e (5a, 5c)

** Items in italics can be located in the online portfolio.*

Table 2: My Beliefs about Learning, the Experts, and My Competencies

III. Learning Involves the Whole Person

The Body

I believe effective learning must involve the whole person; body, mind, and spirit. Table 1 provides an overview of how I view the educational responsibilities for the whole person. While I will not go into much detail regarding the body and its role in the learning, I feel that to neglect its mention would present an unbalanced view of what I perceive about learning. So, in short, the body is involved in learning through the senses. The effectiveness of learning increases the more we include the various senses in the learning experience. The better the physical, the better the senses can function and aid in learning. Watson (2005) in her study involving dance and mathematics and the senses comments that most people can learn about shape by physically interacting with it. “Brain studies indicate that exposure to music alters and increases brain function to make the necessary connections for higher order thinking” (Campabello, Carlo, O’Neil, & Vacek, 2002, p. 5). Because the body is involved in good learning, it makes sense that it would also be important to include how to care for the body and keep it healthy would be an important factor in the learning process. For purposes of this paper, suffice it to say a part of effective learning should include how to take care of one’s health since being sick or impaired can cause challenges in learning.

The Mind and Spirit

While it is impossible to completely separate the body from the mind, and spirit in learning, I want to turn my attention to how the mind and spirit relates to learning. Dewey begin to introduce the concept of hands-on experiential learning in the late 1800s (Ecker, 1997; Field, 2001). Vygotsky (Daniels, 1996) added the idea of social interaction for the development of cognition in the early 1900s. Slavin (Slavin et al., 1985) and Johnson & Johnson (2006) enhanced the social interaction through the concept of Cooperative Learning. Presently, the

research on Cooperative Learning is overwhelmingly positive (Ellis, 2005). Cooperative Learning supports Vygotsky (Daniels, 1996) and provides a method for working effectively within the *Zone of Proximal Development*. In my experience, Cooperative Learning has been very powerful in creating a safe and comfortable environment for learning for all types of students. This leads to the idea that all students can learn.

Everyone Can Learn

In an evidenced-based assessment on research literature regarding reading and its implication for instruction, the National Reading Panel (2000) found that almost all children can learn to read when they are taught systematically, comprehensively, and explicitly. Zull shows that our brains are wired from front to back and both need to talk to each other for real learning. The sensory cortex is the region of the cerebral cortex concerned with receiving and interpreting sensory information from various parts of the body (Dictionary.com, 2011). The back integrative cortex is the furrowed outer layer of gray matter in the cerebrum of the brain, associated with the higher brain functions, as voluntary movement, coordination of sensory information, learning and memory, and the expression of individuality (Dictionary.com, 2011). When instructional methods connect back and forth in the brain during the learning process, students will learn and integrate the information into their lives provided they have enough practices and demonstrations which is about 20 for the average person (B. R. Joyce, Weil, & Calhoun, 2009; Shaywitz & Shaywitz, 2004).

However, not all types of information would apply to this rigorous type of instruction. Factual information, rather than conceptual information, would most likely work better with this type of instruction. There are the two basic types of basic information, factual and conceptual (R. J. Marzano et al., 1992). The effective teacher recognizes that each require different methods for effective teaching. A skilled teacher can ensure that all of his or her students learn. It may not be

in the same way, or at the same time, or at the same age, but they all can learn. Because we are each uniquely wired with special God-given talents each should be lead to develop his or her full potential as created by God. Therefore, it is important to help each understand their unique gifts and talents and how they can use them to contribute to their own success while blessing others.

Industrial Age Needs Verses 21st Century Needs

The traditional educational system interrupts this continuum and tries to mold each student into a set amount of learning, within a particular time frame, and at the same age. This idea follows the industrial model and became a part of our school system during the nineteenth and twentieth centuries. Its purpose was to improve efficiency and prepare students for factory jobs requiring repetitive tasks which has tended to preserve the status quo and is characterized by strict rules and regimented behavior, identical curricula and expectations for all students (Long & Holeton, 2009). However, the skills needed for success in the twenty-first century are vastly different from the needs of the industrial age. According to the U.S. Bureau of Labor Statics (Zoghi, Mohr, & Meyer, May 2007) 3 million manufacturing jobs were lost in 1995 while 17 million service-sector jobs were created. By 2008, eighty-six percent of all U.S. jobs were in the service sector (Apte, Karmarkar, & Nath, Spring, 2008). Obviously, there is a shift from manufacturing to service type jobs in today's economy. We no longer need to be preparing students to work in an industrial world. We need to prepare students to work in a service type world. This requires a completely new set of 21st-Century skills for success. These skills include creativity, innovation, and adaptability with a greater sensitivity to cultural differences, openness to new and different ideas, and the ability to adapt to change (Ewing Marion Kauffman Foundation, July 2007). What we do with learning must prepare the learner to succeed in a vastly different world than what the traditional educational system has typically done.

Discovering Talent

I have heard many talks and sermons about the parable of the talents told by Jesus and recorded in Matthew 25 and Luke 19 (*Amplified® Bible*, 1987). Usually the speaker infers the talents to be money but I believe it could also mean the innate gifts and talents given each at birth. In our “cookie cutter” educational system certain individuals seem to find and develop their talent, but many if not most, follow the path laid out for them and never discover how to be in their “Element” (Robinson, 2009). I believe that real learning must include helping the learner discover, develop, and use his or her gifts for fueling their passion and reaching complete fulfillment in life. This should begin early on in a child’s life and continue into adulthood transferring into an attitude of life-long learning.

Last century’s traditional education dealt mostly with facts and information with little attention regarding the spirit, soul, or passion of a person. The Seventh-day Adventist educational system has included the spiritual in the educational process, but, in my opinion, still has a ways to go when including other things like imagination and passion. Veith (2005) a Christian scholar and culture expert, proposes that C.S. Lewis (1950) wrote *The Lion, the Witch, and the Wardrobe*, an allegory for children, as a Christian counterpart to secular fantasies as literature began responding to the increasing need for using the imagination in an imagination-deprived educational setting. Pert (1999) says it is the emotions that link mind and body. “The molecules of emotion run every system in our body . . . this communication system is in effect a demonstration of the body mind’s intelligence” (p. 19). The world we live in is an ever-connected world of relationships where “the inner soul desires, fuels, hopes and dreams of a state of complete physical, mental, and social well being” (Taylor & Brewer, 2009, p. xii). The Bible says “Train up a child in the way he should go [and in keeping with his individual gift or bent], and when he is old he will not depart from it” Proverbs 22:6 (*Amplified® Bible*, 1987) . Obviously, in order to educate the whole person,

developing the body, mind, and spirit must be included. **Table 3** below provides an overview of my conceptual belief regarding learning.

Learning Involves the Whole Person		
Learning begins as a developmental process. i.e. children cannot learn to read before the brain is developed for that capacity. Once the physical growth process is complete (around age 24) then, the following is true about learning. Until then, the developmental process must be considered as these things are implemented.		
Learning is a Spiral		
Body	Mind	Spirit
<ul style="list-style-type: none"> Senses: Touch, Taste, Smell, Hearing, Sight, Time, Balance, Space How to care for the body 	<ul style="list-style-type: none"> Most learning is social A physical cycle in the brain Everyone can learn Involves two kinds of information: procedural and factual. Focuses on each individual's talents and strengths Is a continuum Is flexible 	<ul style="list-style-type: none"> Spiritual / Soul / Passion Imagination Freedom / Choice Attitude Conscious / unconscious

Table 3: My View of How Learning Relates to the Whole Person

IV. What Learning is Not

The items listed below in **Table 4** are traditional educational, shall I say, tools that I believe have no contribution to learning and in many cases hinder the process. These “tools” are rigid ways of organizing and processing both students and information in our educational system. I believe, at best, they are harmless and, at worst, they destroy self-confidence and creativity through a required conformity from which many never recover. Standardized testing, letter grades, report cards, IQ tests, grade levels, and labeling are all ways in which we compare students with students, ranking some better than others. I do not see how these things help the

learning and development of each individual child to become all that he or she is created to be. Rather, it does assist in pushing individuals into conformity in order to compete. In the end, this does not promote education where learning is supposed to be the process that develops all resources (Robinson, 2009).

Take No Child Left Behind as an example. Diane Ravitch (2011), appointed to public office by both President George H. W. Bush and Bill Clinton, served as a member of the National Assessment Governing Board, which supervises the National Assessment of Educational Progress, from 1997 to 2004. While she originally supported No Child Left Behind and charter schools, Ravitch later became disillusioned and wrote that she no longer believed that this approach would produce the improvement in American education we all want. In the major national evaluation, 17% of charters got higher scores, 46% were no different, and 37% were significantly worse than public schools. She concluded that high-stakes testing, "utopian" goals, "draconian" penalties, school closings, privatization, and charter schools did not work. She now says that the best predictor of low academic performance is poverty—not bad teachers (Ravitch, 2010). Requiring conformity does not improve learning.

Improving learning requires change. The core reason for my teacher study groups is to increase student learning by improving instruction (Henriquez-Roark & Green, 1996). Using the study group model in my staff development program provides support and accountability to enable the teachers to change what they do in their classrooms. Although this change is too slow for my liking, I have seen a shift towards better teacher over the years. This kind of change took careful planning for implementation as I worked to develop teachers who could lead in such change. Promoting the idea to teachers, parents, and school boards required a skillful exercise in public relations that took place over several years. I promoted the Southern Union's version of No Child Left Behind that did not focus on tests results but focused on each student's

performance and mastery moving them forward on a continuum of learning instead of moving them towards conformity with those his or her age. By improving how we do instruction in the classroom, we can increase student learning in spite of poverty levels.

Another example of a type of conformity involves the Intelligence Quotient (IQ) test. In 1904, the French government commissioned Alfred Binet to find a method to differentiate between children who were intellectually normal and those who were inferior so the latter could receive more attention and help in learning. Binet never intended it to identify degrees of intelligence or mental worth and noted that the scale he created did not permit the measure of intelligence (Little, Wynne, Mehta, & Plessis, 2002). In 1916, Lewis Terman of Stanford University published a revision of Benet's IQ test now known as the Standaford-Binet IQ test. Its design was to measure the intelligence of a child, which supposedly is an indication of the child's potential. Terman believed that thousands of laboring men and servant girls were feebleminded and his revised IQ test verified his belief (Terman, 1916, 2008). Terman was a part of the eugenics movement who sought to weed out entire sectors of the population by arguing that his test could identify such traits as criminality and pauperism. Entire ethnic groups were actually targeted (Selden, 1999). The movement actually lobbied for the passage of involuntary sterilization laws in thirty American states. Why do we still use a test that is so discriminatory?

How is it that we as humans can become so fixated on the notion of categorizing and comparing the human race? How is it that we have not been able to recognize the individual value of every individual without elevating some above others? How is it that we think that everyone must fit a certain mold to be valuable? Will it ever be possible to allow our children to grow and develop according to their gifts and talents, unencumbered with comparisons to others?

Learning is Not		
Comparing	Categorizing	Confining
Standardized Tests	IQ Tests	Six-hour school days
Letter grades	Grade Levels	Typical classrooms
Report Cards	Labeling	180 days per year

Table 4: My Belief What Learning is Not

V. Ethics and Personal Development

Over the ten plus years I have been in this program, I have grown both professionally and personally, becoming a more skilled educator, leader, and change agent. As an educator, I have dealt with challenges in my goal of improving the education of teachers and students. I have found guidance for both ethical decisions and development. Three authorities have especially influenced me. Fullan (1999) has provided a reference point and guide for breaking out of the typical mind-set, Quinn (1996) helped me look inside myself for change, and Lee (Lee, 1998) helped me learn how to question and adjust my personal motives in ethical decisions.

One of my goals has been to empower the teachers to make more decisions regarding their school situations at the local level instead of calling my office for help. Fullan (1999) talks about the co-dependency of organizations and I tried to make decisions that would not contribute to this kind of dysfunction. However, dependency from the field on an organization to tell them how to think and what to do is not easily broken. When a teacher would call me for an answer to how they should handle a particular situation, I always tried to provide them with several questions to consider so they could make an informed decision themselves instead of me telling them what to do. Sometimes, I was tempted to take the easy road and tell them what to do, especially when they would press me and say, “Just tell me what to do. You are the boss” and resist my guidance to think it through for themselves. However, for me to purposely contribute dysfunction to a system where administration takes all the responsibility and the constituents

don't take any would not be a personally or professionally ethical action on my part. When "Leaders" allow the people to become dependent on them for things in which the people should be responsible, the "Leaders" creates a co-dependency relationship. Blame is freely placed on the "Leader" when things go wrong. I respond to the stamen about me being the "boss" taking the opportunity to discuss that person's responsibility as an onsite professional. They understand the situation much better than I, and are therefore better qualified to make judgments on how particular decisions might affect the local people.

Ethical decisions regarding a student's grade placement can become quite challenging in situations where the parents want a grade placement that you know will be damaging to the child's educational experience. Making the ethical decision to always do what is best for the child, and this includes considering the reactions of the parents, can require an unwavering morality while being professional and sympathetic with the feelings and perceptions of the parents. Many times, by being professional and sympathetic while not giving in, I have been able to reach the parent helping him or her to rise above their fears of what others think and make a decision that is best for his or her child. When I can, without sacrificing the best interest of the child, I can find a compromise that is accept to both the teacher and the parent. However, when an agreement cannot be reached, we have to agree to disagree (Covey, 2004) and go our separate ways. The best interest of the child must always be the deciding factor of what happens, not who you will upset or the money the school will lose. Finally, when I lie down at night and close my eyes to sleep, I want to know that I have followed the beat of my own drummer and be true to myself (Thoreau, 2005).

VI. Social Systems

The social structure of a culture affects the family dynamics, the community structure, and ultimately global development. Over time, the family structure has changed dramatically and we now have many single parents raising children (Social Science Data Analysis Network, 2000). Understanding the family dynamics in which people function is essential to knowing how to help families and family members be successful in life. There are three main social classes in the United States: poverty, middle, and upper class (Payne, 2005). Payne states that the values and beliefs underlying each particular class are different in each class. It is important to be aware of these differences when working with families. Poverty is the greatest indicator of success in school (Ravitch, 2010) because experiences and opportunities are limited. According to Horizons National (2011), low-income children fall backwards in their reading and math skills, while middle class students jump ahead causing an achievement gap between the two groups that is close to three years by fifth grade. This is why I believe it is important to work with education as a continuum each child helping each child move forward at a successful pace.

Then there are issues that cross all three social classes such as war, alcoholism, illness, death, and blended families. Each issue changes the family dynamics and its function together. Take the issues of a blended family. Some seem to work rather well and others become a disaster. In 1998, I became a part of a blended family as the stepmother. At the time, there was a very limited amount of information available for stepmothers who wanted to learn more. My counselor proved helpful in helping me find the one book that was available, *The Enlightened Stepmother: Revolutionizing the Role* (Norwood & Wingender, 1999). While I tried everything the book suggested, a high-functioning alcoholic husband and father further complicated our family dynamics. With the help of my employer, I did an intervention, went to counseling, and learned all I could about not enabling the situation. The learning experience was huge and

provided me with insight about family dynamics that I never dreamed existed. It also provided me with an insight into the Seventh-day Adventist system and its need to work with their employees and church members who have issues with alcoholism.

VII. Summary/Conclusion

In order for learning to occur, we first make a connection to the new concept through something already known. Once a person connects the new idea to something they understand, a reason for why the learning is important for them personally can be established. Once a person realizes how this helps them personally, they are ready to learn additional information regarding the idea from others. Then the learner applies this new learning to relevant meaning for his or her own personal life. Finally, the new concept transforms/enhances the person's life through changes in thoughts and behavior. Kolb (1984) called this the natural cycle of learning and Zull (Zull, 2002) says it produces a physical change in the brain. McCarthy's (2002) 4MAT model provides an instructional framework which follows this cycle. Generally, learning is social (Johnson & Johnson, 2006; Slavin, et al., 1985) and the process can be effectively facilitated through Cooperative Learning (S. Kagan & Kagan, 2008) methods, which research is overwhelmingly positive (Joyce, Weil, & Calhoun, 2011). Vygotsky's *Zone of Proximal Development* (Daniels, 1996) is where social interaction occurs for learning purposes.

When it comes to learning, most information can be grouped into three categories; factual information, procedural information, and conceptual information (Andersin, et al., 2001; R. J. Marzano, et al., 1992; Robert J. Marzano & Kendall, 2008). Factual information is declarative and consists of memory for repeatedly encountered facts and data. Procedural memory, by contrast, is specifically memory for sequences of events, processes, and routines.

Conceptual information consists of “the interrelations among the basic elements within a larger structure than enable them to function together” (Andersin, et al., 2001, p. 29). It includes knowledge of categories, principles, and models. Each category of information requires a different strategy for ensuring the learner properly grasps the knowledge.

When a skilled teacher or leader differentiates between the types information taught, the delivery to the learner will be different. For example, to remember information such as how a particular policy reads, structures such as nonlinguistic representations or mnemonic devices can be effective (Green & Henriquez-Green, 2008). However, if you want the learner to be able to apply the policy correctly to a given situation, then models such as model, prompt, and practice (Reid, 2010) or coaching with feedback would be more effective. If you finally want the learner to be able to apply the principal of the policy correctly to varying sets of circumstances, one would need to use strategies such as questioning, dilemma, continuum, either/or, and group discussion (Gillespie, Larson, & Larson, 1992).

While learning happens naturally and begins at birth (J. Kagan & Herschkowitz, 2005; Kolb, 1984; Zull, 2002), the facilitation of an artfully skilled teacher/leader working in the *Zone of Proximal Development* (Daniels, 1996) will optimize the learning experiences and help produce fulfilled and happy students, citizens, and coworkers. A smart leader will help individuals move towards functioning in his or her “Element” (Robinson, 2009) to create an optimum environment of fulfillment and productivity. Eisner (1998) views facilitating learning as an expression of artistry, looking beyond the technical to the more creative and appropriate responses. Eisner goes on to say that education is both a connoisseurship and criticism. By connoisseurship, he means the art of appreciation, the ability to see, not merely look; something that one needs to work at—but it is not a technical exercise. Teaching is also an artistry that brings together the technical elements and the ability to see and understand the whole. Criticism, on the

other hand, is disclosure; the ability to help one see or the process of enabling others to see the qualities of something, and to be able to describe (Eisner, 1998; Smith, 2005). In short, connoisseurship means to know what is good and criticism is the ability to describe it to someone else. An effective teacher/leader will wield an artful connoisseurship of skills in facilitating the learning process helping each individual discover how to work in their “Element” for the benefit of everyone.

In conclusion, as an effective teacher, I have developed skills with many teaching methods and have worked with many teachers and students helping them grow and learn. I have read much research on regarding learning and teaching and applied what I have learned in my work through teacher trainings and study groups. I have used my personal ethics to establish credibility with the teachers and parents. I grew up with the social system in the Seventh-day Adventist Church and during the past ten years I have experienced new types of social systems on a personal level, growing tremendously in understanding and personal development as a result. While I still have much to discover, and I am a life-long learner, I believe that I have become an effective teacher and a competent scholar.

References

- Aizenman, C., & Cline, H. (2007). Enhanced visual activity in vivo forms nascent synapses in the developing retinotectal projection *Journal of Neurophysiology*, 97(4), 2949-2957.
- Amplified® Bible*. (1987). Grand Rapids, MI: Zondervan.
- Andersin, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., et al. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Boston: Addison Wesley Longman.
- Apte, Karmarkar, & Nath. (Spring, 2008). Information Services in the U.S. economy: Value, jobs, and management implications." *California Management Review*.
- Campabello, N., Carlo, m. J. D., O'Neil, J., & Vacek, M. J. (2002). Music enhances learning. Retrieved September 14, 2011, from Educational Resource Information Center: http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED471580&ERICExtSearch_SearchType_0=no&accno=ED471580
- Covey, S. (2004). *The 7 habits of highly effective people* New York: Free Press.
- Daniels, H. (1996). *An introduction to Vygotsky*. New York: Routledge.
- Dictionary.com. (2011). sensory cortex. Retrieved September 14, 2011, from <http://dictionary.reference.com/browse/sensory+cortex>
- Ecker, P. (1997). John dewey 1859-1952. *1890's America: A Chronology*. Retrieved from <http://www.bgsu.edu/departments/acs/1890s/dewey/dewey.html>
- Ellis, A. K. (2005). *Research on educational innovations* (4th ed.). Larchmont, NY: Eye on Education.
- Ewing Marion Kauffman Foundation. (July 2007). *On the road to an entrepreneurial economy: A research and policy guide*. Unpublished manuscript, Kansas City, MO.
- Field, R. (2001, 2011). John Dewey (1859-1952). *Internet encyclopedia of philosophy* Retrieved June 13, 2011, from <http://www.iep.utm.edu/dewey/>
- Fullan, M. (1999). *Change forces: The sequel* Ann Arbor, MI: Braun-Brumfield, Inc.
- Gillespie, V. B., Larson, R., & Larson, D. (1992). *Project affirmation: Teaching values*. Riverside, CA: La Sierra University Press.
- Green, W. H., & Henriquez-Green, R. (2008). *Basic moves of teaching: Building on cooperative learning*. Victoria, BC: Trafford.
- Henriquez-Roark, R., & Green, W. H. (1996). The missing piece of the staff development puzzel. *Adventist Education*.

- Horizons National. (2011). Students caught in the achievement gap. Retrieved October 1, 2011, from <http://www.horizonsnational.org/index.php>
- Johnson, & Johnson. (2006). *Learning together and alone: Cooperative, competitive, and individualistic learning* (5th ed.). Englewood Cliff, NJ: Prentice-Hall.
- Joyce, Weil, & Calhoun. (2011). *Models of teaching* (8th ed.). Upper Saddle River: Allyn & Bacon.
- Joyce, B. R., Weil, M., & Calhoun, E. (2009). *Models of teaching* (7th ed.). Upper Saddle River: Allyn & Bacon.
- Kagan, J., & Herschkowitz, N. (2005). *A young mind in a growing brain*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kagan, S., & Kagan, M. (2008). *Kagan cooperative learning*. San Clemente, CA: Kagan Cooperative Learning.
- Kolb, D. A. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice Hall.
- Lee, B. (1998). *The power principle: Influence with honor*. New York: Simon & Schuster.
- Lewis, C. S. (1950). *The lion, the witch, and the wardrobe*. New York: HarperCollins.
- Little, B., Wynne, C., Mehta, S., & Plessis, S. d. (2002). Audioblox. Retrieved September 24, 2011, from http://www.audiblox2000.com/dyslexia_dyslexic/dyslexia014.htm
- Long, P., & Holeyton, R. (2009). Signposts of the revolution? What we talk about when we talk about learning spaces. *EDUCAUSE Review Magazine*, 44(2), 36-49.
- Marzano, R. J., Arredondo, D. E., Brandt, T. S., Pickering, D. J., Blackburn, G. J., & Moffett, C. A. (1992). *Dimensions of learning: Teacher's manual*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J., & Kendall, J. S. (2008). *Designing & assessing educational objectives: applying the new taxonomy*. Thousand Oaks, CA: Corwin Press.
- McCarthy, B. (2002). *4MAT application series*. Wauconda: About Learning.
- National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction. Retrieved June 14, 2011, from <http://www.nationalreadingpanel.org/publications/publications.htm>
- Norwood, P., & Wingender, T. (1999). *The enlightened stepmother: Revolutionizing the role*. New York: Avon Books.
- Payne, R. (2005). *A Framework for understanding poverty*. Highland, TX: aha! Process, Inc.

- Pert, C. (1999). *Molecules of emotion: The science behind mind-body medicine*. New York: Touchstone.
- Piaget, J., & Inhelder, B. (2000). *The psychology of the child*. New York: Basic Books.
- Quinn, R. E. (1996). *Deep change*. San Francisco: Jossey-Bass.
- Ravitch, D. (2010). Why I changed my mind about school reform. *Wall Street Journal* Retrieved September 24, 2011, from <http://online.wsj.com/article/SB10001424052748704869304575109443305343962.html>
- Ravitch, D. (2011). Diane Ravitch curriculum vitae. Retrieved September 24, 2011, from <http://www.dianeravitch.com/vita.html>
- Reid, E. (2010). Practicing effective instruction: The exemplary center for reading instruction approach. Retrieved June 14, 2011, from <http://www.ecri.cc/articles.html>
- Robinson, K. (2009). *The element: how finding your passion changes everything*. New York: Panguin Group.
- Selden, S. (1999). *Inheriting shame: The story of eugenics in america*. New York: Teachers College Press.
- Shaywitz, S. E., & Shaywitz, B. A. (2004). What research says about reading. 61(6), 6-11. *Educational Leadership*.
- Sincero, S. M. (2011). Zone of proximal development. Retrieved September 14, 2011, from <http://www.experiment-resources.com/social-development-theory.html>
- Slavin, R., Sharan, S., Kagan, S., Lazarowitz, R. H., Webb, C., & Schmuck, R. (1985). *Learning to cooperate; Cooperating to learn*. New York: Plenum.
- Social Science Data Analysis Network. (2000). Household and family structure. Retrieved October 11, 2011, from http://www.censusscope.org/us/chart_house.html
- Taylor, A., & Brewer, E. (2009). *Your brain has a bent not a dent*. Napa, CA: Success Resources International.
- Terman, L. (1916, 2008). *The Measurement of Intelligence*. Charleston, SC: Biblio Baazar.
- Thoreau, H. (2005). *Walden*. Stilwell, KS: Digireads.com Publishing.
- Veith, G. (2005). *The soul of the lion, the witch, & the wardrobe*. Carol Stream, IL: Cook Communications.
- Watson, A. (2005). Dance and mathematics: engaging senses in learning. *Australian Senior Mathematics Journal*, 19(1).

Zoghi, C., Mohr, R., & Meyer, P. (May 2007). Workplace Organization and Innovation. In U. S. D. o. Labor (Ed.), *U.S. Bureau of Labor Statistics Working Papers* (Vol. Working Paper 405). Washington, D.C: Office of Productivity and Technology.

Zull, J. E. (2002). *The art of changing the brain* (First ed.). Sterling, Va: Stylus.