A Historical and Philosophical Critique of Progressivism and Behaviorism And Their Relationships to Instruction By: Dr. Thomas Doyal

The following is a historical and philosophical summary of Progressivism and Behaviorism and their profound impact on the field of education.

> Historical and Philosophical Summary of The Progressive Movement And Its Impact on Education

The Progressive movement began to take form in America in the 1830's. It was formed as a reaction to the traditional model of teaching, instruction, curriculum and pedagogy. The traditional model in the state, common, or public schooling system was one seeking conformity, cultural uniformity, and one that shunned diversity. The traditional model was viewed as the best way to further the goals of an expanding economy that was becoming more industrialized and urbanized. The traditional model sought to produce dutiful, not critical thinkers (**Kliebard**).

Like any substantial movement in education, there were variances in the way proponents sought to implement their ideas and ideals. However, two essentials were generally agreed upon. One was the idea that diversity should be respected and given consideration in all aspects of education. The second was that education should promote critically engaged, socially active, critical thinkers. The ultimate goal was to prepare students to engage in the community at large and to collaborate with others to achieve a common good (**Apple, Beane**). The name "progressive" became the name of the movement roughly between 1890 and 1920. It was during this time that more and more educators and theorists began to react toward the prevailing political and social affect our economic and social structure was having on education. As we became more industrialized and urbanized, our communities changed. As the communities changed, we were seen as losing our democratic, neighborhood, family oriented society. We were more focused on business production (**University of Vermont**).

Progressive education aimed to make schools effective agents of a democratic society. While there were numerous educators that articulated the beliefs that progressive education was a positive force in education, one of the greatest influences on the movement was **John Dewey**. Dewey articulated the message that students were missing valuable components of education, namely, the arts and a sense of democratic participation. Since our communities were changing in ways that exacerbated these deficiencies, he advocated for schools to re-instill these important societal functions. Dewey pioneered the **Laboratory School** at the University of Chicago from 1896 to 1904. He experimented with curriculum and instruction and provided compelling evidence that the progressive model could be effective (**University of Vermont**).

Dewey influenced countless educators. Education reformers such as **Francis Parker and Ella Young** were greatly influenced by Dewey's work. Dewey wrote many books and spent a great deal of time lecturing at conferences and universities. As a result of his work, many other experimental schools emerged and the progressive movement grew exponentially. In 1919, the **Progressive Education Association** was formed. Its purpose was to reform the entire American education system. The progressive education movement sought to stop the trend of segregating students into two distinct tracks. There was a move to tract students to either vocational or college preparation.

In the 1920's education moved toward a "scientific model." It viewed curriculum, instruction and assessment as empirical in nature. The provable, observable, data-driven and quantifiable was what was included in the curriculum. Human development, cognitive learning styles and the arts were seen as extraneous. The use of intelligence tests was prevalent as were methods to promote "efficiency" and cost management. Progressive educators advocated for greater consideration for the arts, and using theories of human development in the design and implementation of curriculum, instruction and instructional materials.

In the 1930's educators such as **George Counts** heightened the demand for progressive education. His publication entitled *The New Frontier* published work that advocated building "a new social order." He was famous for advocating a "reconstructionist" viewpoint that was an indictment of the problems associated with the industrialization and corporatization of the American economy. It was their view that this capitalization was having an effect not only on society as a whole but was also bleeding in to our education system.

The progressive movement found strength in the fact that more and more teacher colleges such as the **Teacher's College at Columbia University** were infusing progressive education in to the training of new teachers. **William Kilpatrick** was a student of **Dewey**. Dewey's influences on **Kilpatrick** led him to decide to teach

progressive theories at **Columbia University**. Colleges of Education were producing a generation of progressive-minded educators. Some of the most influential advocates of progressive education were **Bode**, **Pratt and Washburne**. They published a great deal of work and spoke at many conferences that helped give their movement credibility.

The "**eight-year study**" produced material and data that supported the belief that schools using the progressive method were well capable of preparing students for college or other educational paths. There was a period of time starting in the 1950's when progressive education would lose much of its popular support. The cold war had started and with it came a wave of political conservatism. The mood of the country was one of traditional values and thought. With that, the ideas of progressivism were replaced with a more traditional approach to education.

Since the 1950's and subsequent to the end of the cold war, progressive education has found its way back in to the American education system. It has taken on different forms. Some of the forms include whole language, experimental education, multiage approaches, Exceptional Education, English Language Learners (ELL), multicultural education, gender studies and more. Progressive education is becoming a big part of education once again.

Historical and Philosophical Summary of Behaviorism

And Its Impact on Education

Behaviorist philosophy seeks to explain human and animal behavior. It focuses on overt, demonstrable, observable behavior of living organisms. Behaviorists reject any notion or belief in the subconscious or other metaphysical theories. This theory rejects any belief in the notion of a "soul" or "mind." It can be described as the science of studying behavior not the mind or brain activity or theories of brain functions.

Behaviorists reject any theory that would support the idea that animals or humans have any emotions or instincts. Behavioral psychologists reject the concept of awareness, will, thought or consciousness because these ideas are not overtly observable. They would say that only that which is quantifiable is supportable scientifically.

Behavioral psychologists believe that behavior can be shaped or modified by introducing organisms to external stimuli. The basic belief is that animals and humans are controlled by their environment. The various behavioral psychologists have posited various ways to influence behavior. They term these stimuli "reinforcers." There are positive and negative reinforcers. These are naturally occurring or can be introduced by an external force wishing to modify an organism's behavior. This modification of behavior is called "conditioning." Different psychologists have developed different approaches to conditioning such as classical and operant conditioning.

Classical conditioning can be found in the works of many behavioral psychologists. The pioneers of behaviorism, **Pavlov, Thorndike and Watson** would be considered to be classical in their approaches. Later work done by **B.F. Skinner** would be considered to use operant conditioning. Classical conditioning is also known as stimulus substitution. It starts with two "unconditioned" stimuli such as food and the naturally occurring salivation that an animal experiences when seeing or smelling it. There is then an introduction of a conditioned stimulus such as a bell that is rung when the food is introduced. The animal creates an association with the bell and the introduction of the food. Eventually, the mere ringing of the bell conditions the animal to salivate. The animal has been conditioned to respond to the bell. In this case, the behavior has been modified.

Thorndike and Watson expanded on Pavlov's work. Thorndike believed that elements of behaviorism could be applied to education. He emphasized that we should treat information with quantitative accuracy. To accomplish this task, he stressed the foundational belief that scientific rigor that accepts only empirical data should apply in considering curriculum and pedagogy. Everything taught should be measurable.

Thorndike expanded his work in education by advancing the theory of "connectionism." This was a theory that was used to explain how organisms learned. This should not be confused with cognitive learning styles. Connectionism is seen as the linking and connection of stimulus and response that has the by-product of learning. As with other behavior theories, connectionism states that it is the external forces that have an affect on the organism. Thorndike articulated the idea of the "Law of Effect." This states that when the stimulus and effect are connected a positive reward would strengthen that connection. The theory states that negative reinforcement would weaken that connection. The theory states that negative reinforcement would weaken that "Law of Readiness." The law of exercise states that the more a stimulus response bond is practiced, the greater the connection that occurs. The law of readiness is related to biology. The nervous system structure causes certain reactions to occur differently and in greater or lesser strengths.

Watson was a very influential American behavioral psychologist. He too, used the classical conditioning of **Pavlov** as the basis for his work. He slightly differed from others in that he did account for minimal acceptance of basic behavior that is not merely a result of external forces. He conceded that humans might experience emotions such as love and rage as a function of internal factors.

B.F. Skinner had many of the same beliefs of his predecessors. He did vary from other behaviorists in that he moved from classical conditioning and developed "operant conditioning." Operant behavior still uses the method of stimulus-response but adds another element. He states that operant behavior is voluntary behavior that "operates" on the environment. The individual's behavior can be modified so that their actions cause something to happen or change in the environment. In an experiment that uses operant conditioning, the response would be to press a lever. The stimulus or reward would be getting food. The individual would be conditioned in their response to press the lever to get the conditioned stimulus or food as the reward.

As we see, behaviorism seeks to understand how behavior occurs. The implication is that all behavior is modifiable. There are many educators that have applied behaviorism to the school environment. The basic idea is to design ways to modify the behaviors of students to fit with the desired model. The basic belief of a behaviorist is that learning is simply a response to stimuli. The successes and failures are the key stimuli to learning. Behaviorist theory as it applies to instruction can be related to the "traditional" model of education.

How Behaviorism and Progressivism Relate to Instruction

A study by **Ertmer & Newby**, (1993) makes a basic distinction between behavioral and progressive theories and how they relate to instruction. Behaviorists assess learners to determine a starting point for instruction, while cognitivists or progressivists look at the learner to determine their predisposition to learning. One argument that is made to point out a flaw in progressive education is that while genuine education comes about through experiences that are educative, in fact, some experiences are mis-educative.

Behaviorist techniques are used in education in many forms. Some of these seek to illicit desired behavior with rewards as stimuli and punishment as reinforcement of established rules. Some of the strategies in education used to modify behavior are contracts, consequences, reinforcement, behavior modification, and punishment.

Behaviorism has implications for instructional design as well as behavior modification. Behaviorism is usually associated with mastery of content as opposed to cognitive strategies or constructivist strategies. Cognitive and constructivist strategies are progressive. They relate to instruction in that they trend toward higher-order thinking skills such as the synthesis of ideas for problem solving. Behaviorist approaches affect instruction in that it tends to use "knowing what" strategies while cognitive and constructivist are associated with "knowing how."

Traditional education was built on the model that the teacher was the epicenter of the learning process. Knowledge, content and even the purpose of learning flowed from the teacher and would be received by the student. The student was responsible for maintaining his or her attentiveness in a well-structured environment that was modeled after the attributes of adults. Teachers were endeavoring to mould students into smaller versions of adults

The educational theorist, **E.D. Hirsch** made famous his fact-based approach to education in his best selling book *Cultural Literacy*. He put forth the theory that schools need to get back to basics. His book *What Your Kingergartener-6th Grader Needs to Know* is a compendium of content knowledge. He believes these facts are essential bits of knowledge all school children need to know. **The Core Knowledge Foundation** promotes his work where he is the Chairman and Founder. **Hirsch's** theories can be considered in the behaviorist camp in that it is based on and promotes the mastery of content. Other educators often criticize **Hirsch's** theories on two separate grounds. They are criticized pedagogically because of their focus on what to think. This supposedly distracts from the important work of learning how to think. Another criticism of **Hirsch's** methods is that they are Eurocentric. Much of the pre-determined content is based on European history and ideas. Many other multicultural facts and elements of history are not a part of this compendium of knowledge. This exclusion is seen as detrimental in that it ignores an ever-growing segment of our population.

Research has illuminated the fact that behaviorism and progressivism have both had an impact on instruction, curriculum, and instructional design. These two theories present a stark contrast. An analogy can be made to the political world. The comparison can be made in that it mirrors the conservative to liberal relationship. Progressive would be analogous to liberal ideology and behaviorism to conservative.

Progressive education has at its core the intense consideration of the individual. This consideration of the individual has an impact on the design and implementation of curriculum and instruction. Without progressive theories, there would be no multicultural education, special education, ELL programs or other programs that seek to reach a diverse population. The behaviorist model seeks to modify student behavior but has typically been associated with traditional education. The proponents of behavioral psychology as it applies to education clearly intend to form the student in to a predetermined model. The goal is to "condition" the individual to fit into the behavior model of schools and their policies. Some researchers would conclude that the inherent problem with behaviorist dominated educational plans is that they are not geared toward reaching an ever-diversifying student population.

Conclusion

Many research studies seem to conclude that Progressive education seems to be the model that best fits today's schools. The goal of progressive education is to promote democratic participation, build programs to equip engaged citizens and make schools socially relevant. Research by **E.D. Hirsch** has pointed to a lack of reading progress in the area of comprehension. His conclusion is that the **NCLB Act** has forced "teaching to the test" where teachers focus on mechanics without providing a base knowledge of history, science, social studies, etc. to their students. Perhaps taking the successful components of both progressive and behaviorist theories and synthesizing them into one coherent curriculum that stresses foundational content knowledge and considers individual needs, critical thinking, alternative assessment, problem-based learning and building a spiraling curriculum such as that seen in **Bruner's** work would be a combination that would "leave no child left behind."