Theorists from centuries ago have provided support and research about the growth of children in many different developmental areas. Theorists have played and still play a huge role in the education world today. The theorist I have always found to be the most intriguing is the theorist Jean Piaget. I find Piaget to be such an interesting theorist because he knows that education and set goals construct people who are capable to accomplish new things in our world (Cherry, 2013). Throughout this research paper on Jean Piaget I will be discussing his personal biography, his theory of cognitive development, the three basic components to his cognitive theory, how his contributions differ from other theorists', and how we as teachers can use Jean Piaget's theory in our educational practices.

Jean Piaget was born in Switzerland on August 9, 1896 and began his researching career by the age of eleven years old (Cherry, 2013). He was interested in the subject of natural sciences and graduated from the University of Neuchatel with a Ph.D. in Zoology (Cherry, 2013). Piaget studied in the areas of genetics, psychology, sociology, and education throughout his career (Cherry, 2013). He loved collecting data and putting together different research studies in order to state theories. He was extremely captivated by the cognitive development of human thought and how genetics were directly related to them (Cherry, 2013). His study of cognitive development was the first systemic study to ever be developed by any psychologist (McLeod, 2009). His excitement about cognitive development came about after listening to children give wrong answers to logical questions. He discovered that there are many differences in the way children and adults think and that is what has led to his further research (McLeod, 2009). I agree with that because of the simple fact adults have experienced and lived more life than a child and that is what Piaget is trying to say through his theory. After a long life of contribution to psychology, education, and the cognitive development of children, Jean Piaget passed away on September 16, 1980 (Cherry, 2013).

Piaget's theory was strongly based on cognitive development in children and adults (Cherry, 2013). Although Piaget's main focus was evolved around the cognitive growth and development through a person's childhood years. Piaget's theory states that children acquire a sense of knowledge from the experiences they are put in as children and the different interaction they see day to day (Cherry, 2013). Different experiences can definitely shape the person someone is and I do believe most of the experiences that are most beneficial to cognitive development occur in the early childhood years. Piaget focused a lot on his own children's development and came up with four stages of development that every child should pass through at some point in their life to develop cognition (Cherry, 2013). Piaget's goal of his theory was to explicate the processes by which each child develops into individuals who can utilize their brains to think and rationalize clearly (McLeod, 2009). Many theorists before Piaget stated that, "children are smaller versions of adults" which is definitely not true. Childhood is a crucial part in human development and that children and adults think much differently (Cherry, 2013). Piaget's work in the contribution to cognitive development in children has influenced many other theorists including Howard Gardiner and Robert Sternberg (Cherry, 2013).

Jean Piaget's cognitive theory consists of three basic components (McLeod, 2009). The first basic component is schemas. Schemas are the "building blocks of knowledge" according to Jean Piaget (McLeod, 2009). Schemas are instances that help each individual relate to the world. Things such as items, events, and theoretical concepts help make up certain schemas (McLeod, 2009). Schemas are derived from memory and people store these individual memories in their brain. They use these mental assumptions when they are needed. As Piaget discovered, the older

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a child gets the more schemas he or she retains (McLeod, 2009). This is because they have more chances of different experiences and opportunities to develop schemas for the world around them. In my opinion schemas are developed every day. We learn new information every day to be used at some point in time in our future. Many of the schemas may not be relevant now, but someday they just might be.

The second basic component to the cognitive theory is the processes that help us convert from one stage to another to adjust to the world (McLeod, 2009). This transition happens through three terms: equilibrium, assimilation, and accommodation. Assimilation is defined as putting schemas that have developed to use in order to understand or take care of a specific situation. Accommodation occurs when assimilation fails because the schemas developed over the course of experience don't help a specific situation. Accommodation is modifying an existing schema to deal with a newly presented situation or object. Equilibrium is the strength that pushes cognitive development along and drives the learning process (McLeod, 2009). As an adult I still believe that I am put into situations where I do have to develop knew schemas to understand what the situation is and how I am going to achieve it. In my opinion assimilation, accommodation, and equilibration all occur throughout the life-span even into adulthood. Of course, as adults we have collected many more schemas than we had in childhood, but each of the three pieces in the second basic component of cognitive development is used throughout one's entire life. Piaget's cycle of the second basic component is assimilation, equilibration, new situation, disequilibrium, accommodation, and then back to the beginning (McLeod, 2009). This cycle occurs throughout a lifetime.

The third basic component of Piaget's cognitive theory is the four stages of development. The four stages are sensorimotor, preoperational, concrete operational, and formal operational. Piaget explains that each individual child goes through each of the stages in the same order I listed. They do not all occur at the same rate in all children. Out of the four stages, no stage is missed or falsely achieved in the process of a child's development, but some children do not reach the later stages of cognitive development (McLeod, 2009). Each stage is composed of a key feature and an age group that an average child should be going through. The semsorimotor stage's key feature is object permanence and the average age is 0-2 years of age. The preoperational stage's key feature is egocentrism and the average age group that goes through this stage ranges between 2-7 years of age. The third stage of cognitive development is the concrete operational stage and its key feature is conservation. Usually 7-11 year olds go through this stage. Formal operational stage is the fourth and final stage of cognitive development and this usually occurs in children 11 years of age or older. The key feature in this particular stage in manipulating and reasoning ideas in one's own head (McLeod, 2009). Piaget believed that these four stages of cognitive development occur in a variety of children all over the world no matter what their background or culture is (McLeod, 2009). These stages help define how Piaget's theory differs from other theorist's theories.

The difference between Jean Piaget and other theorists are that he was concerned with specifically children and how they develop cognition (McLeod, 2009). He wasn't concerned about all learners in general. He knew children differ from adults in the way they process thought and cognition. Piaget's theory also focuses on specific development in children rather than learning. His theory doesn't focus on how an individual learns detailed knowledge or how a child acts behavior wise because of his cognition (McLeod, 2009). The four stages of cognitive development introduced by Piaget definitely individualized him as a theorist. He wasn't focused

on the behaviors, concepts, or learning process his goal was focused on the progress of cognitive development in each individual child.

The cognitive theory studied by Jean Piaget can be implemented into educational practices that involve individual students and their progressive stages of cognitive development (McLeod, 2009). Piaget's theory is based primarily upon genetic maturation and also focuses on student readiness (McLeod, 2009). Students should only be taught what they are ready to learn and this is part of Piaget's theory. All teachers should come to understand student readiness when looking at children individually. Until individual students have reached their appropriate stage of cognitive development they shouldn't be taught concepts that exceed the stage they are currently going through (McLeod, 2009). I have never thought about how to implement the educational piece of Piaget's theory into my own experiences with children. I find this part of his theory to be extremely interesting and I think keeping Piaget's stages of cognitive development in mind when observing children is very important for early childhood educators to remember. Focusing on the process of learning by setting up goals pertaining to cognitive development instead of focusing on the end result can help benefit each individual student (McLeod, 2009). Also using collaborative strategies such as giving your students a choice to work in small groups or with one other person can influence more schemas or assimilation because of the learning process developing from the collaboration of learning from each other (McLeod, 2009).

In conclusion Jean Piaget's cognitive theory has been known to influence many different theorists on the ideas of cognitive development in children. His research has increased and influenced my understanding of cognitive development in many ways by researching his theory in general, taking a deeper look at the three basic components of Piaget's cognitive development, realizing how his contributions differ from others theorists' perspectives, and how we can use the

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cognitive theory in educational practices today by understanding more about Piaget's stages of cognitive development.

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