

Students learn differently and at different rates

Over the course of the year, the Leadership team will be presenting different ideas, theories and research papers on how we learn? Learning theory is complex, involved and as expected has many points of view. At Ashburton Primary School, as at most schools, we have melded a number of learning theories to develop our beliefs and understandings about how students learn in order to provide the best possible learning outcomes academically, socially and emotionally for your children. Most learning theories abide under three premises;

We learn through social interaction

We all learn in different ways and at different rates

Learning needs to be relevant, meaningful and purposeful

Jean Piaget (1896- 1980) was the most prominent advocate for understanding child development. He applied his broad knowledge of biology, philosophy, logic and psychology and meticulous observations of children to construct his complex theories about child development. Piaget explained many aspects of children thought and behavior by considering them as going through defined stages of growth. His assumption is that all individuals' process through all stages in the same order, however individuals proceed through those stages at an individual rate and are not age defined. The second assumption he made was that each stage builds upon the previous stage. The Victorian Essential Learning Standards is built upon Piaget's theory of child development.

Piaget nominates the following stages of child development, but is keen to point out that whilst ages are given at each stage this is just an approximation and each individual progresses at his or her own unique rate.

Sensorimotor (*birth to 2 years*)- Infants acquire knowledge about the world through their senses and their motor activity. The infant progresses to the point of engaging in trial and error learning and simple problem solving. The major cognitive acquisition is realization that the world is a permanent place and that people, places and things in it continue to exist even when they are out of view.

Pre-operational (2 to 7 years)- The child develops a representational system and uses symbols such as words to describe people, places and things. Children are essentially still 'egocentric' as they do not understand that their view of the world is not shared by other people.

Concrete operations (7 to 11 years)- Children can solve problems logically and are beginning to understand and use concepts that relate to their immediate environment. The most important cognitive skill according to Piaget is the stage of conservation, where the realization that two things that started off the same remain the same even if they are made to look different.

Formal operations (12 – 15 years to adulthood)- children develop the ability to think in abstract terms and deal with hypothetical situations. Children are able to solve complex problems in a systematic way.

How does this relate to teaching and learning?

Teachers understand and utilize the variety of stages outlined by Piaget when choosing and providing engaging and developmental appropriate activities for students. For example, with children in the sensorimotor stage, teachers provide a rich and stimulating environment with ample opportunities for play. Teachers also understand that students will provide different explanations of reality at different stages of cognitive development. Within a learning environment materials and activities are planned and organized by teachers that involve the appropriate level of motor or mental operations for a child of given age. The planning avoids asking students to perform tasks that are beyond their current cognitive capabilities. Understanding of the stages also encourages teachers to use methods that actively involve students and present challenges.

For further information go to http://www.newworldencyclopedia.org/entry/Jean_Piaget this will give you a broad overview of his work.