

Comparing numeracy theorists

[War](#), [Intelligence](#)



There are several theorists that link to mathematical development; their views are very distinct as to how mathematical understanding develops. One theorist that is linked to this development is Jean Piaget, in his research he discovered that children's thoughts develop through taking in information. His researches also lead him to believe that children learn in stages according to an estimated age range. These stages are as follows: * Sensory-Motor — age 0-2 years (using senses) * Pre-Operational — age 2-7 years (using symbols and language) * Concrete Operational — age 7-12 years (logical thought) * Formal Operational - age 12+ years (abstract thought) He also devised the concept of schemas for children to develop, for example some children relate to the rotation schema where they learn by rotating things such as turning taps on and off, watching the wheels on toy cars and stirring water and other resources in a circular motion. Another example of a schema is transporting, these children will enjoy moving object around the room in different ways for example moving blocks from one side of the room to the other in a bag. Another theorist linking to mathematical development is Jerome Bruner, he believed that children learned by doing and then reimagining what they have done by drawing, writing and copying symbols such as numbers. Bruner believed that children in stages, these stages are as follows: * Enactive — age 0-1 — learning through doing physical movements * Iconic - age 1-7 — developing mental images * Symbolic age 7+ using symbols such as language to transfer thoughts He believed that a child is prone to learning and there are certain procedures for the child to follow for cognitive process.