Understanding Child Development: An Analysis of Theories that Explain Student Learning

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CHILD DEVELOPMENT THEORIES

Child development theories help us to understand why and how we change and grow over time. These theories provide frameworks that help us to understand, explain, and predict behaviors that occur during certain stages in development. Educators learn about child development theories to inform their pedagogy. For example, do you believe that children can learn at any age given appropriate instruction, or that children learn according to age-related stages? In order to provide effective and meaningful instruction, educators are tasked with first understanding how children learn. Piaget, Vygotsky, Ackermann, and Bruner are four psychologists who studied child development in order to provide insight into social, emotional, and behavioral growth over time.

According to Piaget's stages of cognitive development, we go through four distinct stages of cognitive development from infancy to adulthood. The goal of his theory is to explain how we develop our thought processes as we age. His research looks at the influences that impact how we understand and interact with the world. This theory helps me to remember the biological and environmental influences that impact student learning. He emphasizes that learning is an individual process.

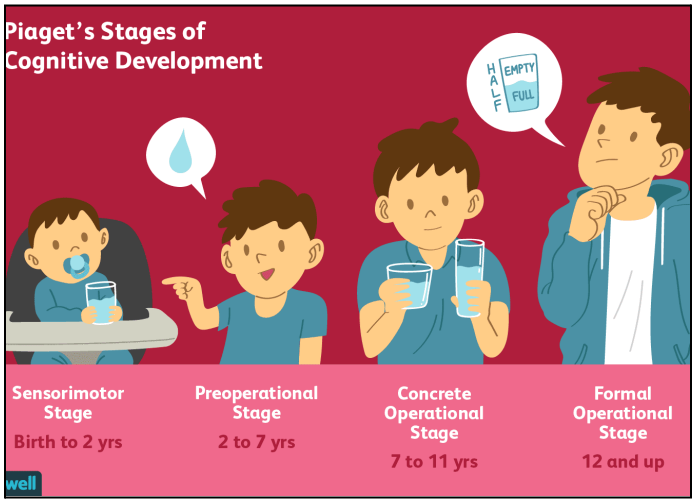

Image 1: Piaget's Stages of Cognitive Development

Similar to Piaget, Vygotsky believed that children learn through hands-on experiences. Unlike Piaget, Vygotsky asserted that learning was social, not individual. In other words, students learn from being in groups and solving problems with some help. He developed the zone of proximal development (ZPD) which is often referred to in schools. The idea behind ZPD is that students learn best when they can approach a topic with some help or guidance. In other words, a task must not be too simple (I can do this by myself without any help) or too difficult (I can't do this at all even with help). Based on my experiences with students, I have observed the impact of ZPD on participation, engagement, and self-efficacy.

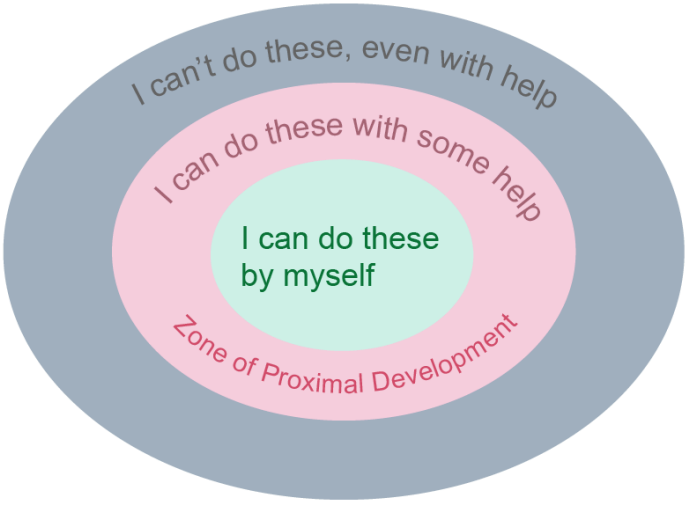

Image 2: Vygotsky's Sociocultural Theory of Cognitive Development

Ackermann's Whole Child Theory asserts that play is an important aspect in learning. Play operates between individual and social learning. The Whole Child Model identifies 4 natural urges that drive development from childhood into adulthood: Me, Us, World, and Creations. Each urge is divided into 2 sub-categories: Me (using my body, knowing myself), Us (relating to others, understanding others), World (exploring and investigating, seeking logic), and Creations (imagining, enacting and creating). Ackermann's theory states that learning is both individual and social. We learn from our environment as well as from ourselves. I can see how

play can support both individual and social learning. Through play, students are less inhibited by the fear of making a mistake as they would be in a more traditional learning setting. Providing opportunities for students to learn when we can formatively evaluate them supports their risk-taking and development of agency.

Image 3: Ackermann's Theory of Whole Child Development

Bruner's theory focuses more on how culture shapes the mind. Culture is the context in which individual members make sense of and appraise incidents and phenomena (Takaya). He proposed a spiral curriculum and discovery learning as ways to emphasize understanding. Information must be structured in a way that supports students to expand and deepen their knowledge while also going beyond what is given. We see evidence of this in universal design for learning (UDL) principles that differentiate engagement, representation, and action/expression. In lesson design, teachers should also plan for variation in order to support all learners (gifted, ELL, special education, etc). Bruner's spiral curriculum works together with Vygotsky's ZPD. Students are able to learn new ideas based on current and past knowledge. A classroom example would be when students reflect on text-to-self, text-to-text, or text-to-world connections. From personal experience, I recognize that my knowledge and understanding of a new topic are greatly improved when I make connections between new information and past

learning. Environment, structure, and sequence are main considerations within Bruner's theory of development.

Image 4: Bruner's Constructivist Theory

WHY WE SEEK TO UNDERSTAND

To be better educators, we must understand who we are teaching. Education happens all around us - at home, at work, with friends, through athletics, through music, when we read, when we listen, when we participate, and when we make mistakes. Therefore, education is both individual and social. Schooling is the process of imparting academic, social, and cognitive skills throughout critical developmental stages. Teachers should understand that schools are home to a diverse population of students who all learn differently. We seek to understand child development theories in order to be better educators. When we understand child development, through the lens of academic research, then we make better decisions. Students learn best when a combination of instructional strategies are incorporated into learning opportunities. As teachers, we need to consider the factors that impact student learning. For example, the theories identified in this paper point out that environment and cultural factors play significant roles in child development.

RECOMMENDATION FOR TEACHERS

Culturally responsive teaching (CRT) and social-emotional learning (SEL) emerged as two practices that support child development. One factor that affects the contemporary classroom is cultural diversity. CRT is when a teacher builds a positive relationship with individual learners, comes to understand which approaches to learning are the most effective for various learners, and is able to adjust how students get access to important ideas and skills, in ways that make sense of and demonstrate essential ideas and skills (Tomlinson). Teachers can take specific steps at the beginning of the year to establish a culturally responsive classroom by taking time to get to know their students and their culture. CRT takes a student's environment into consideration and acknowledges the social nature of learning.

SEL is the ongoing process of internalizing socially constructed social-emotional practices. SEL practices refer to the skills, knowledge, and mindsets that shape how we think about, feel towards, and engage with ourselves, each other, and the world. SEL refers to the emotional learning that happens in classrooms. SEL can be healthy or unhealthy - it SEL falls on a spectrum. Often we think of SEL only as positive, healthy, and best practice. However, we also need to consider that some SEL contributes to systemic racism, discrimination, and violence. SEL is socially-constructed - it's learned behaviors. As teachers, we need to be aware of our SEL practices and reflect on the messages we are sending to students

Theorist	**Theory**	**Take Away for Education**
Edith Ackermann (1946 - 2016)	The Whole Child	Identifies 4 natural urges that drive development: me, us, world, human creation. As a child grows in one area, they indirectly learn something in a related domain. Learning is both individual and social.
Jerome Bruner (1915 - 2016)	Constructivist Theory	Learners must have the opportunity to explore. He

		proposed that teachers use a spiral curriculum to allow students multiple opportunities to master information. Learning is social.
Jean Piaget (1896 - 1980)	Stages of Cognitive Development	Identified 4 stages of cognitive development. He proposes that humans cannot be given information, which they immediately understand and use; instead, humans must construct their own knowledge. Learning is individual.
Lev Vygotsky (1896 - 1934)	Sociocultural Theory	Students learn best through collaboration and social interaction. Coined zone of proximal development (ZPD). ZPD has been described as a zone where learning occurs when a child is helped in learning a concept in the classroom - when a task is not too simple or too difficult.

CONCLUSION

These theories have an important influence on our understanding of child development. In short, teacher's beliefs about their students matter. To meet the needs of all learners and to develop effective goals, teachers need to understand how students learn. Developmental theories can overlap. Each of the theories examined in this paper stem from constructivism and take a position on whether learning is individual (cognitive), social, or both. Teachers should use both social and cognitive constructivism in order to develop an effective learning environment and to meet the needs of all students. Teachers should always keep in mind that each student is unique and different when making decisions. These theories provide important frameworks that help

educators make decisions that impact student learning. Teachers should incorporate culturally responsive teaching and be aware of social emotional learning to develop meaningful and effective learning opportunities that meet the needs of all students.

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