Contributions of important theorists; major progressions in each developmental domain and the ranges of individual variation within each domain; impact of students’ physical, social, emotional, moral, and cognitive development on their learning and how to address these factors when making instructional decisions; and how development in one domain, such as physical, may affect performance in another domain, such as social.

Below are paragraphs about each of eight significant theorists who have helped shape knowledge and skills of effective teachers. Each contributes to the instructional decisions good teachers make on a regular basis. None of these theories gives a teacher all the information needed to make instructional decisions. Each theory provides insight into a different aspect of learning and human behavior. The ideas often interact in the minds of the teacher and the learner. The choices a teacher makes are based on the teacher’s understanding of aspects of these theories and personal conceptions of human behavior and learning. The content in EPSY 302 at SDSU is based on these theories and is closely related to the model based approach to teaching presented during Professional Semester II (PSII).

**Albert Bandura** – A social cognitive theorist who describes how people become self-controlled and self-regulated learners. He and others use a triadic model including personal characteristics, behavioral patterns, and environmental factors that interact and cause an individual to choose personal behavior. Bandura uses the term personal “agency” to illustrate that individuals have control over their behavior and thus can ultimately assume greater and greater responsibility for their learning. As learners get older they are expected to learn more at one time, connect what they have learned to other bits of information, require less supervision, and less prompting, and then study on their own. Teachers are expected generally to nurture this self-control as well as allow students to suffer consequences for not developing such skills.

**Jerome Bruner** – An early constructivist who promoted ideas that students learn through discovery. He argued that students needed to use what they already knew to solve problems. True learning involves “figuring out how to use what you know to go beyond what you already think.” A teacher’s job thus would be to help a student do more efficiently what the student would do on his/her own. Teachers must guide students to make connections between various things they know and the ideas of others. Teachers are expected to design curriculum and learning experiences in ways that allow students to think with information they have, but go well beyond that knowledge to make new discoveries.

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**John Dewey** – An educational philosopher who wanted educational psychology to have practical applications. He established major laboratories to explore his ideas. He believed that the child is an active learner. Prior to his work it was thought that the learner should sit and passively learn in a rote manner. Dewey felt learners learned best by doing. He also felt that learning should focus on the whole child and that the learning should relate to the world in which the learner lived. He also believed that all children, regardless of their social, economic, or racial or ethnic background should be allowed to learn and have a good education.

**Jean Piaget** – An educational theorist whose conception of intellectual development is based on systems of organization and adaptation. He believed these tendencies are both physiological and mental. He said the mind is in a constant process of working with all of the data it experiences. Some information simply fits in the schema and is organized for future use, but when other information is beyond current understanding, the mind must work to transform experiences into a form that the individual can use. When in this state of disequilibrium, the mind seeks to find an equilibrium, a new organization that allows new information to fit. This adaptation is called either assimilation or accommodation. As the learner assimilates new information or accommodates mental schemas to allow new information to fit in, the learner is constructing a personal knowledge base. Piaget goes on to explain that there are four stages of how learners adapt to new information. He proposes that these four stages occur in sequence for all learners. There are two stages of interest for the teachers of grades 7-12. The first is called concrete operations which occur around ages 7-11 years and the second is called formal operations which occur age 11 and older. Concrete operations are described as mental abilities that allow an individual to solve problems by generalizing from concrete experiences. Formal operations are described as mental ability to deal with abstractions, form hypotheses, solve problems systematically, and engage in mental manipulations. From a Piagetian perspective a teacher needs to remember that if a student hasn’t reached the stage of mental operations to do the work being asked he/she can’t do it. Thus some students have a very hard time with certain things the teacher wants them to do with information presented. They then often demonstrate avoidance behavior that seems inappropriate in a learning situation.

**Lev Vygotsky** – A sociocultural theorist who maintains that how we think is a function of both social and cultural forces. He believes that all learning is shaped by the way parents and cultures think and interact. Vygotsky says that social interaction is the primary cause of cognitive growth. Vygotsky suggests that learners can obtain cognitive skills through conversation and interactions with those who are older and more
experienced. It is the explanations that teachers and parents give to children that allow them to grow cognitively. The Zone of Proximal Development is the range of tasks a learner can perform with the assistance of a teacher. It is with dialog, modeling, key questions, and leading hints that the learner can solve new problems and understand more complex material. The teacher also confirms what the learner will be able to do and what the learner has accomplished. This nurturing relationship inspires the learner to push on and work through difficult tasks.

**Howard Gardner** - A theorist who conceptualizes intelligence into eight separate types of abilities. These are logical-mathematical, linguistic, musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. Because Gardner theorizes that these intelligences are independent of one another he says they can be demonstrated at different levels in each domain. Students may be very good/skillful/intelligent in one area and not in other areas. Instructional implications are to allow students to use their primary intelligence, give value to that work, but also encourage the learners to develop intelligences that are less powerful in their own selves.

**Abraham Maslow** - A psychologist who studied human behavior and studied the well-being of well-adjusted individuals. He called these people self-actualizers. These individuals have an inherent need for experiences that will help them fulfill their potential. Some of his most significant propositions are 1) each individual is born with an essential inner nature, 2) the inner self is shaped by unconscious thoughts and feelings but not dominated by them, 3) children should be allowed to make many choices about their own development, and 4) parents and teachers need to help children make wise choices by satisfying their physiological, safety, love, belonging, and self-esteem needs.

**B. F. Skinner** - A behavioral learning theorist asserts that one learns that many voluntary experiences are strengthened when they are reinforced or weakened when they are rewarded, ignored, or punished. His theory includes operant conditioning and refers to the fact that organisms learn to operate in their environment in order to obtain or avoid a particular consequence. The term “instrumental” is used because the behavior is instrumental in bringing about the consequence. Several key terms and ideas include “positive reinforcement”—strengthening a target behavior by presenting a positive reinforcer after good behavior, “punishment” weakens a target behavior by presenting an aversive stimulus after the behavior occurs, “extinction”—weakens a target behavior by ignoring it, “generalization”—responding in a similar way to similar stimuli, “discrimination”—responding in different ways to similar stimuli.

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