Learning Theories

Behaviorism

learning and behavior changes result from linking stimuli and response. It ignores the individual's thought processes and emotions, and focuses only on observable and measurable human behavior.
Educational implications: contracts and punishments to modify behavior

Gamification

the application of game play elements to other activities. Its efectiveness to ehance engagement, academic achievement, and social connectivity has been proven by scientific research time and again. An example of how behaviorism manifests in gamifiction is rewards, badges, or score points given to accebtable behavior.
P.S. the proper design of GBL (game-based learning) or gamified lessons is tricky!

bridge

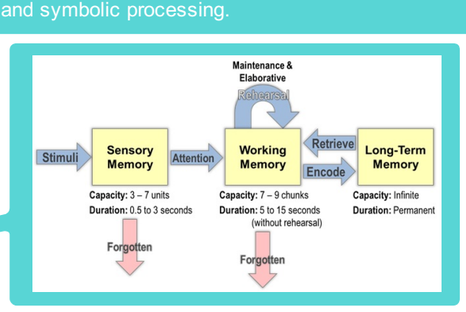
learning is internal and is the result of a student processing and organizing new information. An example of how it can be applied in the classroom is linking new and old concepts together. Discussions, online or face-to-face, are a great example of how this theory can be implied.

Cognitivism

Bandura's social cognitive theory

learning happens as a result of observation, modeling, and imitation. Social nteractions with people and the environment are emphasized. It forms a bridge between behavioral (external) determinants of behavior and cognitive (internal) ones such as thinking and symbolic processing.

bridge



CIP

the interdisciplinarity of neuroscience, psychology, and education has its impacts on educational practices. For example, it provides insights into how attention, anxiety, and sleep impact learning outcomes. It also helps in understanding and dealing with learning difficulties such as autism and dyslexia.
Educational implcations include: arousing attention, consolidation of learning, better interactions with teens, facilitatng language development, and involving emotions in learning.
P.S. successful integration of neuroscience and education requires all concerned parties (educators and scientists for example) to be well-informed about each other's disciplines.

cultural and environmental roles are emphasized

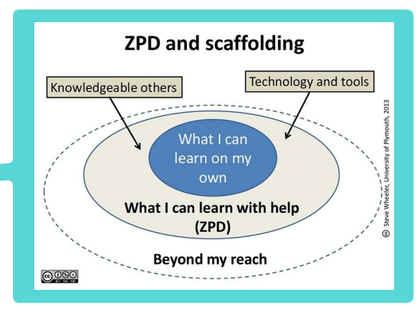
Neuroscience — VR / AI / LM

applications of neuroscience (the study of the human brain) include virtual reality, artificial intelligence, and machine learning, all of which have signficant benefits to education

learning is acquired through social interactions. Culture underlies cognitive development.

learning in the ZPD happens through neuroplasticity

the study of the brain and its development accounts for Piaget's developmental stages



Constructivism

social — Vygotsky

cognitive — Piaget

What a person can learn depends on the developmental stage they are in. development precedes learning.

knowledge is constructed by adapting new information based on previous experiences. Therefore, learning is unique to every individual. Examples in the classroom include problem-based learning, group collaborations, and creative projects

	Piaget	Vygotsky
Sociocultural context	Little emphasis	Strong emphasis
Constructivism	Cognitive constructivist	Social constructivist
Stages	Strong emphasis on stages of development	No general stages of development proposed
Key processes in development & learning	Equilibration; schema; adaptation; assimilation; accommodation	Zone of proximal development; scaffolding; language/dialogue; tools of the culture
Role of language	Minimal – Language provides labels for children's experiences (egocentric speech)	Major – Language plays a powerful role in shaping thought
Teaching implications	Support children to explore their world and discover knowledge	Establish opportunities for children to learn with the teacher and more skilled peers