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EDUCATION

Behaviourism

In education, behaviorism can inform literacy instructions meaningfully by leading teachers to use specific strategies and assessment methods. In essence, it is an important theory that is associated with direct instructions and implications for reading that could improve the students' achievement (Tracey & Morrow 2012).

Generally, three basic behavioral theories contribute to behaviorism; classical conditioning, connectionism, and operant conditioning.

John B. Watson (1878-1958) and B. F. Skinner (1904-1990) are the two principal originators of behaviorist approaches to learning.

Behaviorism in the classroom can be used to establish classroom norms, expectations, and manage student behavior.

Ex. External reward/punishment systems (treats, hw passes, classroom 'cash') If A (then student) gets Y (reward) Or, if B (then student) gets Z taken away (punishment)

Cognitivism

Major Theorists/Scholars -

Jean Piaget (1896–1980) Albert Bandura (1977; 1986)

Taking our students into our school forest comes to mind when I think of this application process. We might start off by taking a simple nature walk and transition into 'art' journaling. Then, as time progresses we may start to identify different trees, medicinal plants, and birds. Drawing and labeling each in our journals. Each time we go out for an adventure we are able to expand on the knowledge we have already received/organized. This will also create a collaborative learning environment.

Psychologists and educators began to de-emphasize a concern with overt, observable behavior and stressed instead more complex cognitive processes such as thinking, problem solving, language, concept formation and information processing (Snelbecker, 1983).

Piaget identified four major stages: sensorimotor, preoperational, concrete operational and formal operational. Piaget's theory centered around the idea that instruction should be adapted to various learning stages of an individual.

Constructivism

In the classroom the constructivist approach might look like planning a community garden in an outdoor education class as a means to understand environmental science principles: from the planning, preparing, and studying of land erosion to soil testing and seed germination.

Major Theorists/Scholars -

John Dewey Lev Semyonovich Vygotsky (1896-1934)

Cognitivism vs Constructivism - "Most cognitive psychologists think of the mind as a reference tool to the real world; constructivists believe that the mind filters input from the world to produce its own unique reality" (Jonassen, 1991a). Both cognitive and constructivist believe learning is an 'active' process rather than passive.

Methods: Lecture tests •Methods:

- Drill and Practice
- Rote learning
- Multiple choice

- Discovery
- Collaborative group work
- Scaffolding
- Self-guided learning based on personal experience
- ·Peer grading/ review

Cognitivism

Learning goes beyond external: is an internal process short & long term memory

Connectivism Constructivism

Behaviorism

passive: learns

Learner is

via external

positive

processes i.e.

reinforcement

Learner builds

[internal], active

& social in the

on personal

experience

Learner is self-directed learning via nodes [content source, people groups] within network

•Methods:

- Lecture
- Visual tools: mind maps. charts etc to facilitate memorization for learning
- Multiple choice & essay assessment

•Methods:

- ·Self-directed quest for content
- ·Sharing of content, sources
- Spontaneous learning groups
- Creates knowledge collaboratively

Humanism

Major Theorists/Scholars -

Sidney, Hook H.J. Blackham

Humanism is a theory that is centered around a person's full potential for the good of the individual, as well as, the society in which they live. Rich in historical context with roots in the Renaissance. Humanism heavily focuses on the idea of improving dignity, social autonomy, and living conditions for all.

Humanism in the Classroom

I find my own approach to teaching to be quite heavily influenced by that of humanistic psychology. I have found that giving my students' a sense of ownership, empowerment, and say in their learning experiences greatly increases their engagement.

One of the drawbacks to this approach that I have found is even with a smaller class size, having multiple assignments and forms of delivery puts a lot of pressure on the teacher. At one point, I had twenty-two students reading elevent different books. That meant, I had eleven different book studies and different end of the quarter assessments to deliver. Not ideal to say the least.

Experiential Theory

Major Theorist / Contributors

David A. Kolb

John Dewey (1859-1952)

Dewey argued that how one interacts with their environment directly influences how they learn. "The teacher's responsibility was to be aware of where each child was intellectually and provide appropriate problems for the child to solve" (Zhou, Molly and Brown, David, 2015, pgs.48-49).

Four Step Experiential Learning Cycle:

- Experiencing
- Reflecting
- Thinking
- Acting

Experiential learning the process of learning through doing is my personal favorite and preferred application process. Giving students the opportunity to be active learners and not solely passive consumers of information. Whether the experience is a field trip, an experiment, or a novel which invokes a strong emotional response/reaction. For the experience to be meaningful it should be tailored to meet the needs of each individual student. Students are encouraged to explore individually, make connections, and become emotionally invested in the process. Some examples of experiential learning opportunities are; internships, apprenticeship opportunities, field trips, and cooperative (co-op) learning.

Transformative

Major Theorist/ Contributors:

Jack Mezirow (1923-2014)

There are two very distinct roles in a transformational learning process. The teachers 'role' which transmits and delivers information to the student. And, the students 'role'; which is to receive, store, and act upon information they have received.

An application process might look like; asking students to make connections and develop solutions to real world problems.

<u>Six Interdependent Elements That Nurture the</u> Transformational Process

- 1) Individual Experience
- 2) Critical Reflection "questioning the integrity of deeply held assumptions and beliefs based on Prior Experience" (Taylor, 2009, p. 30).
- 3) Dialogue (communication) analyzing personal and socio cultural factors
- 4) A Holistic Practice feeling (embracing and creating emotion)
- 5) Personal and Sociocultural recognizing that environment and prior experiences influence learning
- 6) Authentic Relationships being aware of oneself; particularly how learner interests and needs may differ from teacher needs and interests (Raumgartner 2019)

Connectivism

Major Theorist/ Contributors:

George Siemens Stephen Downes

"The connectivist model emphasizes the idea that knowledge is stored and manipulated by information technology" (Siemens, 2004). A relatively new learning theory that takes into account the effects of digital technologies on education and learning processes.

Applying a connective methodology in the classroom may look like transitioning from that of a teacher-centered to a student-centered pedagogy; allowing access to technology readily available to all students. Connectivism recognizes that 'knowledge' can be accessed via non-human forms. In an ever changing world recognizing and implementing such technologies isn't only necessary, but it is essential to seeing that today's students are capable of competing with the global network.







Perry's Positions of Cognitive Development

Major Theorist/ Contributors:

William Perry

Perry's stages of cognitive development provide a model for understanding *how* college students come to 'know' and the cognitive process involved in thinking / learning (knowledge). Perry's Scheme of intellectual development proposes nine <u>positions</u> or levels with the transformative sequences that connect them.

Perry's model provides a framework which recognizes that higher education is not only acquiring knowledge, but the development of thinking skills too.

Heterogeneity inevitably impacts our ability to help students individually master specific subject matter. Students have different needs and different levels of cognitive development thus causing them to learn 'knowledge' differently. However, the process and position of which knowledge is obtained per Perry's stages of cognitive development recognizes the relatively predictable stages in which brain development occurs.

Social Learning Theory



The basic fundamentals of social theory are quite simple; people learn by observing what other people do. We can learn from anyone - teachers, parents, peer groups, internet influencers, celebrities, co-workers, and athletes.

Social Learning Theory (SLT) was developed by psychologist Albert Bandura.

Social Learning can have a number of real world application processes which help us to understand positive and negative behaviors. For example, it can help researchers understand how violent behavior and outbursts in children may be a result of observed behaviors on TV, social-media, or other forms of media/gaming. Likewise, it can help us understand how positive (role) models can encourage desirable behaviors and to facilitate social change. Parents and teachers today see the importance of modeling appropriate behavior. For example, one of the best ways to get a child to read is to model for them - let them see you reading!

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