Online Resource

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Behaviorism

❏ Behaviorism emphasizes that learning occurs when an individual responds favorably to some type of external stimuli.

Developed by John B. Watson, B.F. Skinner, & Ivan Pavlov in the early 20th century. Insisted that learning occurs purely through processes of association and reinforcement.

❏ Behaviorism emphasizes observable behavior rather than internal mental processes.

Gives no consideration to internal thoughts or feelings. Instead, focuses purely on how experiences shape us.

Examples in Practice

1. Positive Reinforcement
2. Behavior Contracts
3. Getting Benched/ Timeout
4. Response Cost

How Behaviorism is applied to Theory

Learning outcomes are often defined in terms of observable changes in behavior. For example, a teacher might assess whether a student can correctly solve mathematical problems or reading comprehension. By focusing on the observable behavior educators can objectively measure student progress and tailor instructional strategies to support learning goals.

Limitations against Behaviorism

Behaviorism primarily focuses on observable behaviors, neglecting internal cognitive processes such as thoughts, beliefs, and emotions. This restricts the understanding of complex human behaviors. Behavorism tends to disregard the role of insight, understanding, and meaningful learning experiences. Learning is not solely about conditioning responses to stimuli but also involves making connections and drawing conclusions. Behaviorism may be less effective in promoting higher-order thinking skills such as problem solving, critical analysis and creative expression.

Conclusion

- Behaviorists see learning as an observable change in behavior as a result of experience and repetition. This stimulus-response theory makes no attempt to assess the mental processes necessary for learners to acquire, retain, and recall information. The change in behavior is simply achieved through a conditioning process using reinforcement and punishment.

Cognitivism

- Cognitivism views the mind as an information processor, and it recognizes the role of memory in the learning process
- Cognitivism considers the limits of working memory and the impact of cognitive load on learning.
- Also, places emphasis on metacognition, which involves self-awareness and self-regulation of one's own thinking processes.

Major Theorists

❏ Jean Piaget- Proposed a theory of cognitive development that described stages of cognitive growth from infancy through adolescence.
❏ Lev Vygotsky- Introduced the sociocultural theory of cognitive development, which emphasizes the role of social interaction, cultural tools, ect.
❏ Jerome Bruner- Contributed to the development of cognitive psychology and educational theory.

Cognitivism Importance

Cognitivism helps us understand the intricate mental processes involved in learning, such as perception, memory, attention, problem-solving, and language processing. This can provide insights into how to create optimal learning environments. Cognitivism acknowledges the diversity of learners and the importance of individual differences in learning styles, cognitive abilities, and prior knowledge. Technology-enhanced learning tools can leverage cognitivist principles to provide interactive, personalized and adaptive learning experiences.

Examples in Practice

Metacognitive Strategies

Problem Based Learning

Feedback & Reflection

Students might use self-questioning techniques to monitor comprehension while reading a text.

Students work collaboratively to solve real-world problems or case studies. Encourages inquiry-based learning and helps students develop transferable skills.

Educators use formative assessments techniques, peer feedback, and self assessment opportunities to help students reflect on their learning progress.

The limits of applicability of Theory

Cognitivism tends to focus primarily on individual cognitive processes and often overlooks the influence of socio-cultural factors on learning. Ignoring these factors can limit the applicability of cognitivism, particularly in diverse and culturally rich learning environments. Theory and dynamic systems perspectives offer alternative frameworks for understanding the non-linear nature of learning. Failure may restrict the applicability of cognitivism in dynamic and emergent learning environments. There are inherent limitations to the accuracy and validity of measurements of internal mental states, which impacts of cognitivist findings across different learning contexts.

Experiential Learning

Key Concepts- A process of learning through experience, reflection, and action. This refers to the first learning cycle, where learners engage in direct, hands on experiences. These can be real life, or experiments to take on new information or challenges. Reflection observation analyze their experiences reflecting on what happened, identifying patterns or connections. The active experimentation stage encourages learners to take risks, explore alternatives and learn from their actions.

Major Theorists (EP Learning)

❏ John Dewey- Dewey emphasized the importance of learning through doing and reflection. Focused on the integration of experience, critical thinking, and problem solving.

❏ David A. Kolb- Developed the experiential learning theory. According to Kolb, learning is most effective when concrete experience, reflective observation, abstract conceptualization, and active experimentation are integrated.

❏ Carl Rogers- He believed that learners should be actively involved in the learning process and should focus on the individual's experiences and perspectives.

Examples in Practice or Context

- ❖ Internships & Apprenticeships

- ❖ Workshops

- ❖ Learning Projects

- ❖ Interns provide hands on learning opportunities for students to apply academic knowledge in a professional setting. Through reflection and feedback they deepen their understanding of the field and develop the skills needed.
- ❖ By actively engaging in projects students apply theoretical concepts to practical problems, develop empathy and social responsibility, and reflect on their actions.

Limitations

Implementing experiential learning effectively requires specialized knowledge and skills on the part of educators. Teachers may require professional development and training to design, facilitate, and assess experiential learning activities in ways that enhance student learning. Educators must ensure that EPL activities are purposeful and relevant to the core curriculum to maximize learning experiences. Overcoming resistance to change and fostering buy-in for EPL requires effective communication, collaboration, and advocacy.

Transformative Learning Theory

Key Concepts- This theory focuses on how individuals undergo significant shifts in their perspectives, beliefs, and ways of understanding the world. Transformative learning occurs through critical reflection on one's experiences, which leads to the transformation of one's values, behaviors, and assumptions. Through critical reflection individuals explore alternative viewpoints, consider new information, and reevaluate their perspective in light of their experiences.

Major Theorists Include

→ Jack Mezirow- Considered the primary theorists of transformative learning. Laid the foundation for understanding how individuals undergo profound shifts in their perspectives and ways of knowing through critical reflection.

→ Patricia Cranton- Made significant contributions particularly in the context of adult education. Her work explores the role of emotions, identity, and power dynamics in transformative learning.

→ Edward Taylor- Emphasized the role of emotions intuition and spirituality in transformative learning. His work highlights its connection to personal growth and self awareness.

Examples In Practice

- ★ Reflective Journals

- ★ Learning Trips

- ★ Inclusive Sports & Games

★ By regularly reflecting on their experiences, students gain self-awareness, identify patterns in their thinking, and track their personal growth over time.

★ During these trips students interact with different cultures, environments to reflect on their own identities, values, and beliefs, in relation to broader social and cultural dynamics.

★ P.E classes promote acceptance, empathy, and respect for individual differences. Inclusive sports helps develop teamwork, communication skills, and leadership abilities.

Limitations against Transformative Learning

Critics argue that the concept of "transformation" is subjective and may be difficult to measure or evaluate objectively. Also, resistance to change, fear of uncertainty, and cognitive dissonance may hinder individuals' ability to engage in transformative learning. As transformation is inherently subjective traditional assessments may not capture the complex changes that occur as a result to transformative learning experiences. Transformation is not necessarily a linear process, and individuals may revert to familiar patterns under stress or faced with conflicting situations.

Connectivism Learning Theory

Key Concept- Suggests that learning occurs through networks, where learners make connections, between diverse sources of information, collaborating with others, and access knowledge across digital platforms and other online communities. Through networked learning, learners access information, share ideas, and collaborate with peers, experts, and resources distributed across digital environments. They can also co-create meaning and generate new insights that extend beyond individual cognition.

Major Theorists Include

- ❏ **George Siemens- Developed this theory in the early 2000s. His work explores the intersection of learning, technology, and networked environments, emphasizing the role of digital networks and distributed knowledge in shaping learning processes and outcomes.**

- ❏ **Stephen Downes- His research and writings on networkedlearning, open education, and online pedagogy. His work explores the implications of connectivist principles for educational practice, digital citizenship, and lifelong learning in the digital age.**

Examples In Practice

Technology Integration

Social & Collaborative learning

Virtual Coaching & Feedback

Connectivism relies on the integration of technology in education to create interactive, collaborative learning environments that support networked learning, digital literacy and knowledge creation.

Social learning, collaboration, and collective intelligence in education is critical to connectivism. Teachers and learners participate in online communities where they engage in dialogue, share resources and co-create knowledge.

Students can record themselves performing physical skills Teachers would use these recordings to provide personalized feedback students will receive support to enhance their physical skills and performance.

Limitations

The digital divide chatacterized by disparities in access to technology and internet connectivity, can limit the ability of some learners to participate fully in networked learning environments. Online communications may lead to feelings of social isolation and disconnection for some learners. Learners may be overwhelmed by the sheer volume of information available online to filter, evaluate, and synthesize relevant information. Learner may also be hesitant to engage in online activities if they have concerns about privacy breaches, data security, and digital surveillance.

Reference Page

1.   Clark, Kevin R. "Learning Theories: Behaviorism." *Radiologic technology* 90.2 (2018): 172–175. Print.

1.   Kendra Cherry, Mse. (2023, March 13). *Influential theories about how children grow and develop*. Verywell Mind. https://www.verywellmind.com/child-development-theories-2795068

1.   Tprestianni. (2023, August 17). *Behaviorism in education: What is behavioral learning theory?*. National University. https://www.nu.edu/blog/behaviorism-in-education/

Video link

 https://youtu.be/fFZs7I4FxP4?si=sJ3sx2N419kvX7HP

https://youtu.be/gugvpoU2Ewo?si=1_SFIJiTzpdlMok3

Reference Page

Experiential learning: Center for teaching & learning. Experiential Learning | Center for Teaching & Learning. (n.d.). https://www.bu.edu/ctl/ctl_resource/experiential-learning/#:~:text=Learning%20that%20is%20considered%20%E2%80%9Cexperiential%E2%80%9D%20contain%20all%20the,to%20learn%20from%20natural%20consequences%2C%20mistakes%2C%20and%20successes.

Kendra Cherry, Mse. (2022b, November 16). *The David Kolb theory of how experience influences learning.* Verywell Mind. https://www.verywellmind.com/experiential-learning-2795154