

# Theorists who have impacted education

Psychology, Behaviorism



There have been several theorists who have impacted education. The research they have conducted and the theories they have devised have taken education to a new level. B. F. Skinner emphasized the importance of consequences in learning. He is the best-known learning theorist in the behaviorist tradition. Skinner formulated the basic principle of operant conditioning which is a response that is followed by a reinforcer is strengthened and therefore more likely to occur again. A reinforcer is a stimulus or event that increases the frequency of a response it follows. The principle of operant conditioning is a very useful and powerful explanation of why human beings often act as they do, and its applications to instructional therapeutic situations are almost limitless. In order for operant conditioning to occur the reinforcer must follow the response, should follow immediately, and must be contingent on the response. Reinforcement comes in two different categories primary and secondary and can come in two different forms, positive and negative. Punishment I is when the stimulus is presented. This can be a scolding or a failing grade. Punishment II is when a stimulus is removed, usually an unpleasant one. Some examples of this are loss of privileges or monetary fines. Decreases in behavior occur very quickly because of punishment. Effective forms are verbal reprimands, restitution and overcorrection, positive-practice overcorrection, time-out, in-house suspension, and response cost. In his operant conditioning theory, Skinner said that organisms often learn that a particular response leads to reinforcement only when a certain stimulus is present. This is known as a discriminative stimulus. Stimulus control is when an organism is more likely to make certain responses in the presence of certain stimuli. This is where

his popular formula (S+) R → Srf In the classroom, teachers can provide additional discriminative stimuli that let students know how to behave. This strategy is known as cueing. Skinner paved the way by showing the importance of consequences in learning, since that time, behaviorists have begun to incorporate elements of cognition and motivation into the views of human behavior and learning. Albert Bandura felt that a great deal of human learning involves watching and interacting with other people. Learning by observation and modeling is the focus of social cognitive theory and is based on behaviorist principles, but also includes many cognitivist ideas. According to Bandura, " Most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. " Social cognitive theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences. Bandura states that four processes are necessary in order for someone to model another's behavior. The first one is that a person must pay attention to the model, especially the important parts. An example of this would be trying to learn how to shoot a basketball. You must look at the model and see how they hold the ball, do they bend their knees, do they jump, when do they release the ball? If a person didn't pay attention to those details, but instead chose to look at the model's hairstyle and clothing, they probably wouldn't learn how to shoot a basketball. The second example is retention. A person must remember what they have just witnessed. There are different ways to this. They can rehearse what they just saw by repeating it over and over in their minds. They might come up with

catchy jingles, make up songs or acronyms that will serve as memory codes for them. The third example is motor reproduction. When learners are able to perform the learned behavior, they are able to get instant feedback about how to improve their performance. The last component for successful modeling is motivation. We must give learners a reason to want to demonstrate what they learned. A perfect example of this is used in the high school in my school district. If students are earning an “ A” in their class for the semester, they are excused from taking their semester exams. This motivates the students to pay attention in class, complete assignments, and do well on their exams, so they aren’t left with the stress of preparing for semester exams. The three characteristics that people possess who are likely to model are they are competent, prestigious, and powerful. Social cognitive theorists propose that people often become increasingly self-regulating over time. Self-regulation is when children gradually learn which behaviors are and are not acceptable to people around them through both direct and vicarious reinforcement and punishment. Over time, they develop their own ideas about appropriate and in appropriate behavior and choose their actions accordingly. Some of the implications of social cognitive theory are as follows: 1. Exposure to a variety of other models further enhances students’ learning. An example of this is inviting different adults into the classroom on different occasions. This could be police officers, doctors, nurses, the mayor, etc... These people will probably demonstrate appropriate behaviors and attitudes that model good citizenship, responsibility, and health. By exposing students to successful individuals of both genders, from many cultural and socioeconomic backgrounds, and with a variety of

disabilities, teachers can help students realize that they themselves may also have the potential to accomplish great things. 2. Teachers should help students set realistic expectations for their accomplishments. An example of this might be helping students set their own accelerated reading goal that they are supposed to meet for the current nine weeks. A teacher can help students succeed by help them form optimistic self-expectations that are also reasonable given current ability levels. By allowing students' to set their own goals, it is teaching students to be self-regulating. The teacher can give the student the freedom to develop their own goal and meet with them regularly to see how they are doing at obtaining the goal. 3. Students often learn a great deal simply by observing others. Teachers must be consistent in the rewards and punishments they administer from student to student. An example would be to devise our classroom rules and come up with consequences for not following the rules. There may be students in the class that may have a learning disability, so their consequences may have to be a little more lenient. The teacher must establish communication with the students to let them know that no favoritism is being shown to any student. 4. Students must believe they are capable of accomplishing school tasks. Teachers need to help foster self-efficacy by helping students achieve classroom success. This can be done by helping them master essential basic skills and providing guidance and support for tackling more advanced ones. I feel that one of the most important concepts that I learned from this class and from the social cognitive theory is modeling. Teachers and school officials model a variety of behaviors, attitudes, and values in their daily interactions to students every day. It is essential that they demonstrate

fairness, high ethical standards, open mindedness, and positive reinforcement. One sure way to do this is by being consistent with rewards and consequences in the classroom. Another way to apply social cognitive theory is to teach students self-regulation. This is discovering the boundaries to teach them how to set standards and goals and give them room to grow. They need to be pushed to test the waters on their own, but still be sure that they have help if they need it. Another important element is to grow self-efficacy in each student. This might be harder for some students than it is for other. A teacher might have to present a lesson in a different way to a select few students than to the entire class. They need to be sure to set obtainable goals for all students and show students that with effort and persistence students have the potential to learn and achieve great things. Cognitivism is currently the predominant theoretical perspective within which human learning is studied and explained. The roots can be found back to the 1920's and 30's. The Gestalt psychologists stated that perception is normally different from reality. This means that a perception of an experience is sometimes different from the experience itself. Another contribution they made is that an organism is predisposed to organize experience in certain ways. Human beings are predisposed to structure their experiences in similar predictable ways. This is shown through the law of proximity. People will perceive those things that are close together in space as a unit. They also coined the phrase, " The whole is more than the sum of its parts. " This means that human experience can't be successfully understood if various aspects of experience are studied as separate, isolated entities. An example of perception is the illusion of movement. We can only view the movements

when two or more lights are present. Humans won't perceive motion in a single light. An example related to learning is learning the song "Jingle Bells" in a certain key. If the key of the song changes, we will still recognize the tune and be able to sing along even if the specific notes to be played will change. During the 1960's, the limitations of behaviorism became more widespread. Learning theorists realized that they had to bring mental events, cognition, into the picture. Contemporary cognitive learning theories share a number of common underlying assumptions. Four of these assumptions are:

- People are actively involved in the learning process. They ultimately control their own learning. People will determine how they will mentally process their experiences, and the cognitive process will determine what is learned.
- Knowledge is organized. The learning process helps contribute to this organization because people usually learn most effectively when they relate new information and experiences to things they already know.
- Some learning processes may be unique to human beings. People possess abilities unique to species. This process involved in learning is often quite different for human beings than they are for nonhuman animals. Because of this, almost all research within the cognitivist perspective is conducted with human beings, and theories formulated from this research are typically not generalized to other species.
- Learning involves the formation of mental representations or associations that aren't necessarily reflected in overt behavior changes. An internal, mental change is involved in learning rather than the external behavior change. This helps learning occur without affecting a learner's observable performance. Students control their own learning through the cognitive processes in which they engage. This means

that in order to learn, students must make active responses in the classroom according to B. F. Skinner. Other cognitivists share Skinner's view, but they believe that it is a students' mental activity rather than physical activity. Teachers must consider not only what students need to learn but also how they students are trying to learn it. Instructional practices can have a significant impact on how students mentally process classroom material and thus also on how effectively students learn it. Teachers must ensure proper guidance to help students learn effective ways to study. An example would be to use visual images, to make up acronyms or use of chanting songs to help them learn information. This is just the tip of the iceberg with things teacher can do in the classroom to enhance education. Thanks to theorists like B. F. Skinner, Albert Bandura, and the Gestalt psychologists, they have paved the way to teach us educators wonderful strategies to provide our students the best education.