Overview and Contributors
Anderson and Dron (2011) tell us that the “behavioural learning theory begins with notions of learning which are generally defined as new behaviours or changes in behaviours that are acquired as the result of an individual’s response to stimuli” (p.82). The stimulus-response theory of learning is one of the leading tenets of the behaviouralist system, emphasizing the relationships between a stimulus, or outside condition, and a response, either through conditioning or reinforcement (Davidson-Shivers & Rasmussen, 2006, p. 41). Major players in the development of the stimulus-response theory include John B. Watson, William Kaye Estes, Edward L. Thorndike, and most importantly Ivan Pavlov and B. F. Skinner.

Major Principles
The stimulus-response theory is principled in two forms, classical conditioning and operant conditioning. Classical conditioning gives focus to how the stimulus affects a change in learner behavior res. This type of learning is effective when the goal is for the subject to have an instilled response to a stimulus. Operant conditioning, which is often used in education, is based on the consequence of responses, either positive or negative (Davidson-Shivers & Rasmussen, p.41; Smith & Ragan, 2005, p. 25). “Most studies of behavior from the S-R tradition focused on temporal variables and those that related to motivation, such as reward magnitude and deprivation state” (Holland, 2008, p.228). Subscribers to the S-R theory are more interested variables that can create individualized/collective responses than motivations of the learner.

Application
Classical conditioning can be applied when the goal is for the subject or collective to have an instilled response to a stimulus. For example, a school uses classical conditioning to ingrain a student response to the flashing lights and high pitched siren (stimuli) of the fire drill with the response being that they immediately leave the building. Classroom applications of operant conditioning can be effective in terms of “practice, reinforcement, active learning, shaping, and modeling. Behavioral research results have shown that repetition through practice strengthens learning” (Davidson-Shiver & Rasmussen, p.41). The popular game Number Munchers from the 1990’s allowed students to practice math skills through repetition, with positive reinforcement in the form of passing a level, and negative reinforcement in terms of being eaten by the antagonists and loss of “lives” if the player “eats” the wrong answers. According to Kazepides (1976), conditioning can benefit learners in helping to develop appropriate habits (p.59-60). Various types of reinforcers can be beneficial to aid in student learning, but not necessarily student understanding. Additionally, educational systems can use conditioning models to instill principles of acceptable behaviors in employees/students to aid in faculty ability to help students learn, or workers’ ability to produce, instead of focusing on student behavior issues. This use of operant conditioning can indirectly benefit student learning.

References

