LEARNING THEORIES ACTIVITY

Directions: Read the Jonassen Chapter and complete the following chart focusing on how the tenets of each theory aligns with the principles of Theory Building, Cognitive Conflict, and Conceptual Change.

Suggestions: Include enough detail to make this a useful reference in the future.

Learning Theory	Key Theorist(s)	Summary of Theory	Relationship to: Theory Building, Cognitive Conflict, and Conceptual Change (i.e. what does the theory say about how learning occurs?)
Anchored Instruction	John Bransford	This theory is a technology-based approach to learning that uses anchors (i.e. problems, stories, situation, etc.) to enhance the learning of the student and allows students to formulate problems. Students are able to draw connections and making learning meaningful. Another way to look at this is calling it goal-based scenario modeling. It also encourages exploration.	Similar to problem-based learning (PBL), however, there are some differences. In PBL students are required to complete a lot of research in the beginning. While using the Anchored Instruction theory students are engaged in activities that allow them to solve problems. In order to solve the problems students will need to search for the necessary information, plan their steps of solving the problem, and gathering the results.

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Cognitive Flexibility Theory	Rand J. Spiro Paul J. Feltovitch Richard L. Coulson	Using multiple representations students can have their previous knowledge changed to make room for new learning. The ability to adjust one's former way of thinking and allowing to a new way of thinking. This theory uses hypertexts which allow the learner to gain more information about a topic to be used in forming new thinking/ideas.	This theory says that learning occurs by using previously known concepts to demonstrate new learning. Multiple representations/perspectives are needed. Example taken from Internet Resource from the University of South Alabama: I really liked the example of learning a new language. Students can transfer their knowledge of another known foreign language to help them with the new one. If the student knowns Spanish then learning Italian can be transferred from Spanish into Italian, since both languages are Latin based.
Connectionism	Edward L. Thorndike	This theory uses trial and error (stimuli and response) as a type of learning. Another way of saying this is what we experience is how we perceive things. Thorndike has a well-known example of putting a cat in a box. Through the cat's trial and error experience the cat learned that in order to get out it had to press a lever.	Connectionism is based on what we experience through trial and error, which is how connections are formed and strengthened in the one's learning.

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Constructivist Theory	Jerome Bruner	This theory is based on the idea that learners create new ideas or concepts based upon what they have experienced in the past. Their background knowledge allows them to make connections to organize the information being presented and then helps them construct their new learning/thinking.	Learners learn best while doing or being actively engaged in an activity. Since everyone brings their own background knowledge to a learning situation people will take away different pieces from the lesson.
Experiential Learning	Carl Rogers David Kolb John Dewey Jean Piaget	Learning from one's experiences. This theory draws on the student's personal involvement in the learning process. There are two types of learning 1) cognitive (sit and get) and 2) experiential (go and do) with the latter students learning wants and needs are met.	Learners are able learn using this theory by being involved in the learning. An example of this would be student teaching. You can talk about being a teacher or you can be in the classroom for several weeks and gain real experience.
Information Processing	George A. Miller	This theory is the way we process information humans. There are three components. 1) sensory memory 2) working memory and 3) long-term memory. All of these components working together help us process information being taught.	Learners in this theory break up the learning/ information being presented. This is why we can only remember 3 to 4 numbers at a time (i.e. telephone number [602-4113] or license plate [CBC5121]).