



## Learning Theory Utilization

**Scenario:** I am currently designing a middle school human anatomy course, in which I am teaching 6th-8th graders about the parts and functions of the human musculoskeletal, cardiovascular, digestive, nervous, respiratory, reproductive systems and human sensory organs (integumentary system, sight and hearing).

At the middle school level, learners are interested in acquiring knowledge for learning's sake. However, for this exercise, I will explore how I would present the same content to adult learners.

**Constructivism:** Constructivism, whose leading figure was the French developmental psychologist Jean Piaget, adheres to a few basic principles:

- Knowledge is constructed; students take pieces of information and put them together in their own unique way.
- People learn to learn, as they learn.
- Learning is an active process that involves sensory input to construct meaning. learning and development.
- Learning is a social activity.
- Learning is contextual.
- Knowledge is personal.
- Learning exists in the mind.
- Motivation is key to learning<sup>1</sup>.

I enjoy designing science and engineering classes for kids using the constructivist framework. Children enjoy exploring, learning through play, working on hand-on projects in groups and teams, and contextualizing content as they learn.

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<sup>1</sup> Western Governors University (2020, May 27). *What is Constructivism?*  
<https://www.wgu.edu/blog/what-constructivism2005.html#openSubscriberModal>

For my middle school human anatomy course, I am utilizing vocabulary lists, OER readings, engaging YouTube videos about how the body works, and fun hands-on projects.

**Andragogy:** A human anatomy course designed for adult learners would need to follow the andragogy learning theory. American educator Malcolm Knowles made four assumptions about the characteristics of adult learners:

1. Adults need to be involved in the planning and evaluation of their instruction.
2. Experience (including mistakes) provides the basis for the learning activities.
3. Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.
4. Adult learning is problem-centered rather than content-oriented<sup>2</sup>.

Instead of learning for the sake of learning, adults would be interested in an anatomy course to either advance career prospects or to improve their health.

In contrast to the vocabulary lists and informational readings I am offering the middle school students, I would present research studies and articles that focus on how the workings of body systems (cardiovascular, digestive, respiratory, reproductive, etc.) contribute to physical fitness, well-being, and longevity. Furthermore, I allow students to choose projects that allow them to measure improvements to their own health. Finally, for adult learners, I could employ gamification by allowing students to earn points and badges as they improve their body systems.

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<sup>2</sup> Kearsley, G. (2010). Andragogy (M.Knowles). The theory Into practice database. Retrieved from <http://tip.psychology.org>