**Add 5 Minutes of Active Learning to Any Topic in the Classroom.**

**By Kelly A. Hogan**

***University of North Carolina at Chapel Hill, Department of Biology***

***http://instructorexchange.pearsoncmg.com/***

***Make sure your students always come equipped with 3 x 5 cards and you can design an active learning exercise on the fly with these 6 ideas.***

***Discussion type question***: Have students anonymously write their answer to a question on the card, then have them swap it with a neighbor, then they swap with another neighbor, and swap again. Students don’t know whose card they end up with, but they become the “reporter” of the information. Students are more willing to share in a discussion if they have seen a few other answers already and if the answer they are sharing (which they fear could be wrong) is not their own.

***Drawing***: Ask students to draw an image. For example, “How can two amino acids physically distant in primary structure be close in tertiary structure?” Or, “Draw an overview of photosynthesis including inputs and outputs”, *etc*. Ask them to swap cards with a neighbor and critique each other for accuracy. You might also take up a few random samples and project them to the class for a group discussion about what is weak and strong about the drawing.

***Competition***: Have students write their answer to a question or a set of game show like questions. Randomly choose two rows of the room (or samples from two rows) and tell them they will be scored. The row with the most right answers wins (candy of course!) Competition is always enjoyed in my class!

***Design a test question***: Ask students to design a question on a particular topic (multiple choice, compare/contrast etc). They can be instructed to use the front side for the question and the back side for the answer. Ask students to then swap their card with a neighbor and answer their partner’s question. Ask them to also critique the quality of the question and decide if it requires only recall or a deeper thinking skill. Students may do a second swap with a different neighbor or you can bring a few to the front of the room for class discussion. (Collect these at the end of class and maybe let a TA use them in a review session.) This activity allows you a reason to discuss and teach higher level thinking skills while applying it to the content at-hand.

***Figure legends***: Show students an image that you know from experience is difficult for a lot of students. Instead of walking through the slide as a lecture, ask them to write down a few sentences that they might write if their job was to author figure legends for a textbook company. Have them swap with a neighbor and discuss.

***Analogies***: Ask students to work with an analogy to a topic just discussed. For example, “How is protein production like a shoe factory?” Or leave it more open-ended and ask students to come up with their own analogy, such as for transcription and translation. Have students pass them to the instructor. Pick a few to read on the spot (anonymously) and keep the rest for your enjoyment and amazement!