1116-VS-357 **Russell R Coe*** (coer@sunysuffolk.edu), 110 Moonlight Walk, Holbrook, NY 11741. *Behind the Scene: What the Brain Thinks the Eyes Are Seeing.*

Most students trying to solve a mathematics problem want to see a problem that looks exactly like the one they saw their instructors do in class. So when they see a problem that looks different than the ones they saw in class, many of them simply give up. Often a student will have become difficulty solving a problem in mathematics simply because when he or she looks at the problem, the student either thinks he or she sees something that isn't there and then uses the wrong approach to solve the problem, or the student does not see something that is staring the student in the face. For example, when given the problem of solving the equation $\sin^2\theta - \cos^2\theta = 0$, a student may think he or she is seeing a trigonometric identity and not realize he or she is seeing a difference of squares. A student needs to be flexible enough in the way he or she views a problem in order to be able to find the solution. In this talk I will discuss the need to teach students to be flexible in the way they think and present several examples of where this applies. (Received August 27, 2015)