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**Kien H Lim\*** ([kienlim@utep.edu](mailto:kienlim@utep.edu)), Department of Mathematical Sciences, 500 W. University Avenue, El Paso, TX 79968-0514. *Using Error-Eliciting Problems via a Classroom Voting System in a Capstone Course to Foster Conceptual Understanding and Mathematical Habits of Mind.*

An error-eliciting problem refers to an assessment item that can potentially draw out errors caused by a misunderstanding/misapplication of a concept/procedure. Consider this problem: Which inequality is appropriate for finding of the values of  $k$  that will make  $2x^2 + 5x - k$  always positive? Only 5 out of 29 prospective 4-8 math teachers correctly selected  $25 + 8k < 0$ , 10 selected  $25 + 8k > 0$  and 11 selected  $25 - 8k > 0$ . Such an answer distribution is an impetus for prospective teachers to discuss among themselves which answer is correct and why. With proper orchestration, they can enhance their understanding of the discriminant and become aware of students' tendency to mistake positive discriminant for positive function. In addition to addressing common misconceptions, error-eliciting problems can be used to help prospective teachers to (a) become aware of their own impulsive disposition; (b) experience the need for mathematical habits of mind such as attending to meaning of symbols, sense making, considering falsity, and checking for correctness via a different approach; and (c) make connections among concepts, procedures, and representations. A classroom voting system can enhance the learning environment because students generally find the "game show" atmosphere exciting (Received June 12, 2011)