

*Using Group Quizzes to Engage Students in Learning Calculus*  
Fei Xue and Jean McGivney-Burelle, University of Hartford



*Fei Xue is an assistant professor of mathematics at University of Hartford. He earned his B.S. degree in applied mathematics from South China University of Technology in 2001 and his Ph.D. in mathematics, from the West Virginia University in 2006. His interests are asymptotic analysis of differential and difference systems, time scales, and pedagogical calculus research.*



*Jean McGivney-Burelle is an associate professor of mathematics at the University of Hartford. She received her M.S. from Northeastern University and her Ph.D. from the University of Connecticut. Her research interests involve investigating how to use technology to improve the teaching and learning of mathematics.*

*As noted in *Beyond Crossroads* (AMATYC, 2006), for today's students, learning mathematics is participatory and depends on the active involvement of students (p. 53). The National Council of Teachers of Mathematics shares the point of view that the teaching and learning of mathematics should include giving students ample opportunity to think about, write about, and discuss mathematical problems and ideas with their peers (NCTM, 2000). The point that both of these professional organizations recognize is the majority of students do not learn mathematics by simply sitting in a classroom, listening to a teacher, recording notes, memorizing assignments and regurgitating answers. Rather, they must read mathematics, reflect on it, talk about it, write about it, and relate it to their prior knowledge. Simply put, they must be actively engaged in the process of constructing their mathematical knowledge.*