

***A Study of Silent versus Vocal Students in the Context of a Constructivist,
Active-Learning Introductory Chemistry Course***

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We present results of a study of several large active learning Chemistry classrooms. Current research has demonstrated that vocal students benefit from active learning. The important question our study addresses is whether “silent” students, those who do not vocally participate in class, also benefit. This talk will present the Concept Development Study approach used in these classes, a constructivist method that we designed to accompany an active learning approach. Statistical analyses of learning gains and student motivations show that, while both vocal and silent student benefit from this learning context, vocal students experience greater learning gains than their silent classmates.