

Implementation and Results of Active Learning Strategies in Large Enrollment Classes

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A traditional chemistry format consisting of three-hour per week lecture with accompanying three-hour lab periods has been transformed into three two-hour periods per week of hands-on activities where students work in collaborative groups and the instructor serves as the facilitator for learning. The Student-Centered Active Learning Environment for Undergraduate Programs, better known as the SCALE-UP Project, fully integrates lecture and laboratory formats into a seamless session. The project has investigated the classroom designs, classroom management techniques, and research-based curricula needed to make activity-based instruction effective for classes of up to 99 students.