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Samer S. Habre* (shabre@lau.edu.lb), P.O. Box 13-5053, Beirut, Lebanon. *The Reformed ODE Curriculum: Students' Solution Strategies, Students' Approval of the Qualitative Approach, and the Importance of Incorporating a Writing Component.*

A reformed ODE curriculum has been in use at the Lebanese American University since the beginning of this century. This presentation highlights some of the research conducted on students enrolled in sections I taught using this reformed curriculum. I investigated students' strategies to solve ODEs in a reformed setting; in particular, I examined if students consider slope fields to solve ODEs and whether they can read information from these fields. It was found that students' first attempts to solve equations are mostly quantitative. This was followed by an exploration of students' approval of a geometric approach to solving equations. It was found that students are initially reluctant to accept this approach but eventually appreciate it. The latter results were confirmed by examining the point of view of one student who took the course twice using each time a different approach. The inclusion of a qualitative approach side-by-side with the quantitative one necessitated that the learner is able to combine the two approaches. Incorporating writing came naturally to achieve this goal. Writing skills were initially unsatisfactory, but my research has shown that these can be improved if emphasized by the instructor and expectations are clearly spelled out in the writing assignments. (Received August 26, 2015)