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**Clickers beyond the First Year**[1] MARINA MILNER-BOLOTIN, TETYANA ANTIMIROVA, ANNA PETROV, Ryerson University — There is ample evidence that the use of interactive engagement methods in the introductory physics courses produces significant learning gains. During the past decade peer response systems (clickers) became very popular among the science faculty. Their readiness to adopt clicker technology can be attributed to the constantly increasing class sizes and simultaneously decreasing level of student preparation. However, to the best of knowledge, the use of clickers has hardly penetrated beyond the first year science courses. At Ryerson University, we decided to study the effect of clicker-based pedagogy on student physics learning beyond the first year. "Modern Physics" and "Electricity and Magnetism" are the second and third year courses in our B.Sc. Medical Physics Program. Although both courses have an enrollment of fewer than 40 students per course, achieving significant learning gains proved to be challenging. Moreover, there is a lack of research data on how upper level science students perceive the effectiveness of clicker pedagogy. To answer these questions we conducted extensive interviews with the students and administered detailed surveys. In this paper, we report the preliminary results of the study and outline directions of future research.

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Marina Milner-Bolotin
Ryerson University

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