

ZMATH 2016f.01375

Heissel, Jennifer

The relative benefits of live versus online delivery: evidence from virtual Algebra I in North Carolina.

Econ. Educ. Rev. 53, 99-115 (2016).

Summary: Over one million K–12 students pursue virtual education every year, but researchers know very little about the effectiveness of such programs. This paper exploits a district policy change that suddenly shifted advanced eighth graders into a virtual classroom for Algebra I. After the policy, higher-ability eighth graders in the treatment district began taking Algebra I in the virtual classroom at rates similar to the statewide average of their peers in traditional classrooms. The change in course delivery provides a unique opportunity to study effects of a virtual course on academic outcomes. The analysis uses variation in program uptake across performance quintile, district, and year in a difference-in-difference-in-difference approach to estimate the causal effect of the virtual course, finding that eighth grade virtual students tend to underperform relative to eighth graders who took Algebra I in a traditional classroom *and* relative to pre-policy, same-district students who had to take the course in ninth grade.

Classification: U53 H23 H33

Keywords: virtual education; online education; algebra; middle school

doi:10.1016/j.econedurev.2016.05.001