



Course Access in Missouri, Updated

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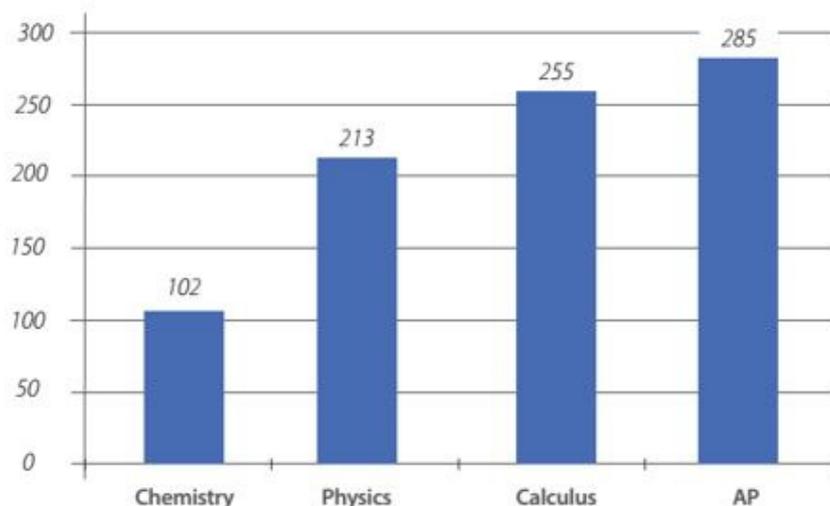
A little more than a year ago, Brittany Wagner and I published a paper titled “[Course Access in Missouri: Diversity, Personalization, and Opportunity](#)” wherein we looked at programs that allow flexibility in the funding that states send to local school districts to allow students to better customize their school schedule.

As part of that paper, we looked at the current state of course access in Missouri, and used Department of Elementary and Secondary Education (DESE) enrollment data to try and determine which districts did not have any students enroll in advanced classes like Calculus, Physics, or AP courses. We looked at this question because there is evidence that many rural districts struggle to offer these classes.

To investigate, we reached out to DESE and asked for enrollment data in Chemistry, Physics, Calculus, and AP courses from the 2014–15 school year. We counted up the number of districts that had zero students enrolled and then subtracted it from the total number of districts. Here is the figure from the report.

Figure 1

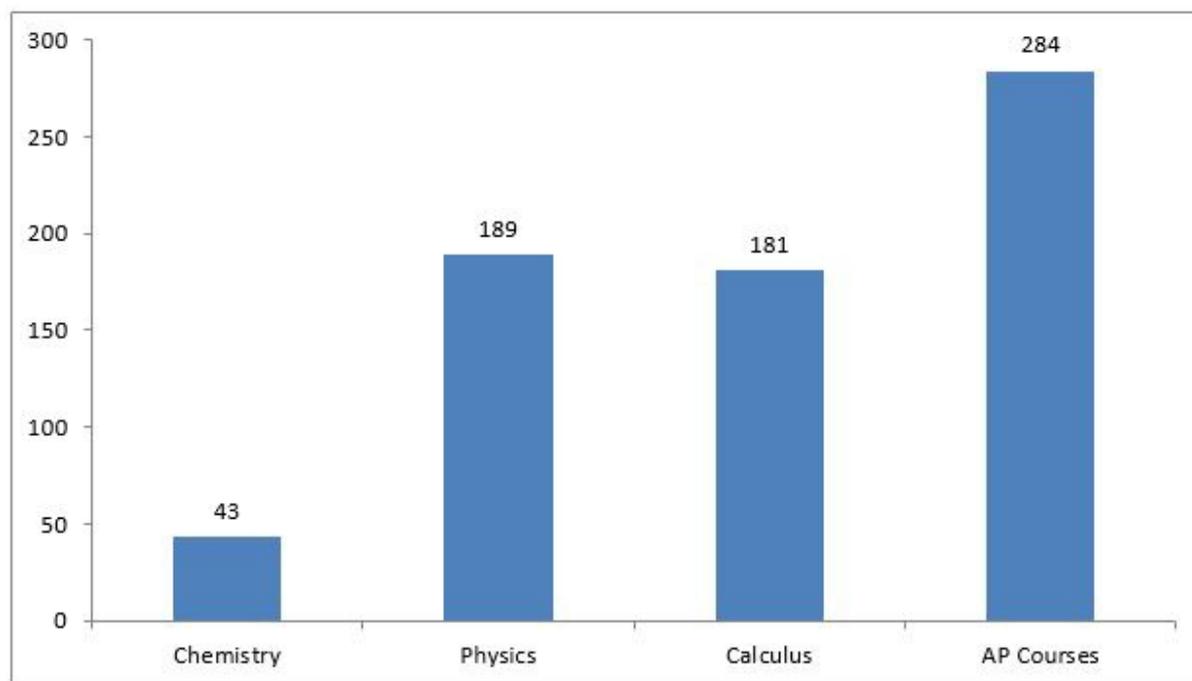
Districts in Missouri with zero students enrolled in selected courses



Source: Missouri Department of Elementary and Secondary Education.

We wanted to update these data for the 2015–16 school year, so we again contacted DESE for the enrollment numbers. This is what course access looks like in 2015–16:

Districts in Missouri with zero students enrolled in selected courses, 2015–16

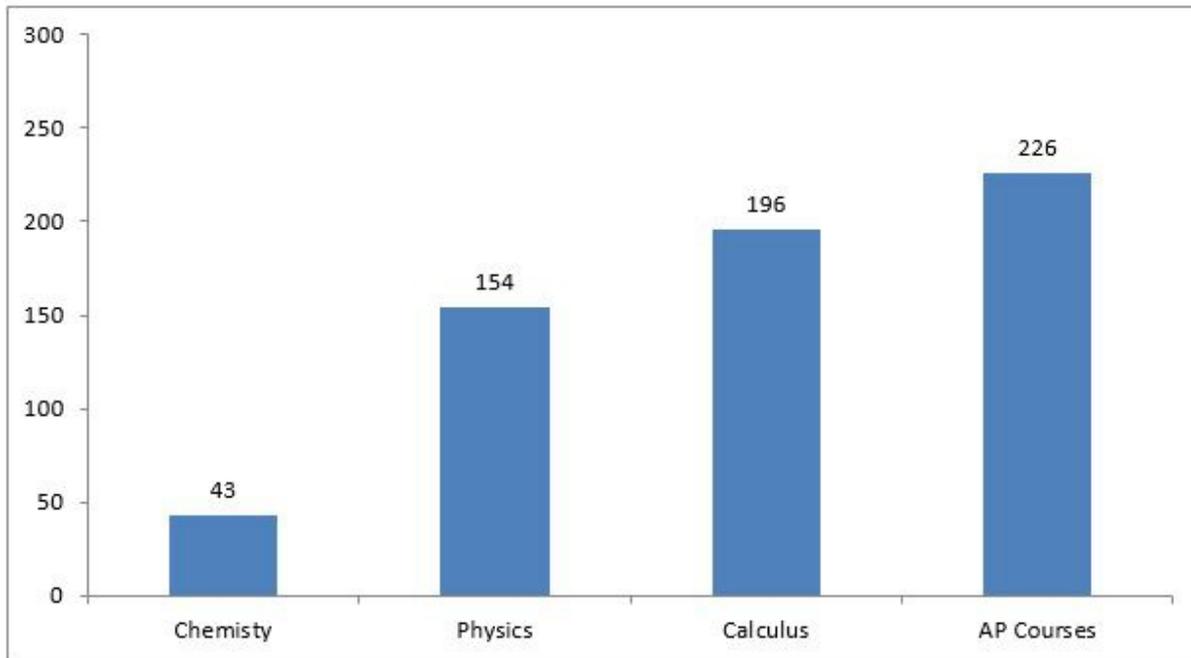


The numbers for the 2015–16 school year are still striking. In percentage terms, 9 percent of districts that offer high school did not have a single student enrolled in Chemistry, 42 percent did not have a single student enrolled in Physics, 40 percent did not have a single student enrolled in Calculus, and 63 percent did not have a single student enrolled in an AP class.

In the process of updating these numbers, I realized that I made a coding error in the data set upon which the figure in the original paper was based. Careful readers of the paper will see that

we subtracted our enrollment numbers from 507, even though there are 518 school districts in Missouri. We did this to try and exclude from our analysis school districts that didn't offer high school because there is no way they could offer these advanced classes. According to [DESE's 2017 "Fast Facts" page](#), DESE lists 448 districts that offer high school, not 507. After chatting with the good data folks at DESE, we confirmed that in the 2014–15 school year, Missouri also had 448 districts that offered high school. Accordingly, Figure 1 from our Course Access essay (which is also Figure 5 [in this essay](#)), should look like this:

Districts in Missouri with zero students enrolled in selected courses, 2014–15



My apologies for our original miscalculation, but our argument still stands (the figure with 2015–16 numbers uses the correct total number of districts—448). In too many school districts across the state, too few students are enrolling in higher-level coursework, and course access programs can help fill that gap.

Two notes regarding the graphs above: When counting Physics courses, in both years, we excluded a class called "Physics First," as this is a course for 9th-graders, not what we would consider an "advanced" course for high school upperclassmen. In calculating the 2015–16 figures, we counted any AP courses both for the AP column and for the respective subject matter column.

About the Author



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