



# TESTIMONY

March 6, 2018

## COURSE ACCESS IN MISSOURI

*By Susan Pendergrass*

Testimony Before the Missouri Senate Education Committee regarding  
House Committee Substitute for House Bill 1408.

### TO THE HONORABLE MEMBERS OF THIS COMMITTEE

Thank you for the opportunity to testify. My name is Susan Pendergrass, Ph.D., and I am Director of Education Policy for the Show-Me Institute, a nonprofit, nonpartisan, Missouri-based think tank that advances sensible, well-researched, free-market solutions to state and local policy issues. The ideas presented here are my own and summarize the research regarding the need for a course access program to serve students in Missouri.

Currently, school districts are not compelled to pay for students to enroll in courses that are not taught in their school building unless the district is classified as Unaccredited under the state accountability system (which none currently are).<sup>1</sup> The burden is on the students and their parents to either convince their district to pay for courses or to pay for

them themselves.<sup>2</sup> Students who are interested in pursuing careers in many science, technology, engineering, or math (STEM) fields, for example, are on their own if their school district can't or won't provide courses in advanced math and science.

Unfortunately, according to an analysis by the Education Commission of the States (ECS), in 2013–14, over 30 percent of high school students in Missouri did not have access to calculus, about 20 percent had no access to physics, and ten percent couldn't access chemistry.<sup>3</sup> And yet, according to ECS, STEM jobs will grow by 9 percent in Missouri over the next 10 years, including an expected growth of 14 percent in advanced manufacturing jobs.<sup>4</sup> In Missouri, STEM jobs earn, on average, over \$34 per hour, compared to \$18 for non-STEM jobs, and unemployment in STEM jobs is less than 2 percent. Can we afford to deny Missouri students access to the education they will need to pursue these jobs?

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In terms of college readiness for STEM, just five percent of Missouri high school students took an AP math exam in 2015, and six percent took an AP science exam.<sup>5</sup> By comparison, 14 percent of high school students in the United States took an AP math or science exam that year. These data are from a federal data collection,<sup>6</sup> and they back up earlier findings of researchers at the Show-Me Institute. These researchers found that in the 2015–16 school year, 40 percent or more of school districts in Missouri that had high schools, had no students enrolled in advanced Physics or Calculus, and over 60 percent had none enrolled in AP courses.<sup>7</sup>

Given that just 17 percent of Missouri 8th-graders have math teachers who majored in math and 36 percent have science teachers who majored in science, it's not likely that we will be able to staff our way out of this problem,<sup>8</sup> which would be the most expensive solution in any case. Paying the tuition for students who successfully complete an on-line course through the Missouri course access program is a much more cost-effective solution for districts, and it can have a big impact on students' opportunities. Under the proposed legislation, districts would be required to pay no more than approximately \$450 for a semester-long course and \$900 for a full-year course, and for no more than two courses per student per year. Of course, districts would be free to negotiate lower rates with the online provider.

The structure to create the Missouri course access program is in place via the Missouri Virtual Instruction Program (MoVIP). The need for students to be able to take the courses they need to reach their full potential is clear. Missouri has an opportunity to expand access to high-level coursework for their students and thereby improve our competitiveness in high-demand job markets through HCS HB 1408.

## NOTES

1. State of Missouri Statutes, Title XI Education and Libraries, Chapter 167.121 Assignment of pupil to another district – tuition, how paid, amount – lapsed, unaccredited, and provisionally accredited districts, enrollment in virtual school permitted, Section 2.(1).
2. State of Missouri Statutes, Title XI Education and Libraries, Chapter 161.670 Virtual public school established, eligibility for enrollment – state aid calculation – rulemaking authority.
3. Education Commission of the States. *Vital Signs – What is the state of STEM where you live and work: Missouri*. STEM Content. <http://vitalsigns.ecs.org/state/Missouri/curriculum>. Accessed on February 20, 2018.
4. Education Commission of the States. *Vital Signs – What is the state of STEM where you live and work: Missouri*. STEM Demand. <http://vitalsigns.ecs.org/state/Missouri/demand>. Accessed on February 20, 2018.
5. Education Commission of the States. *Vital Signs – What is the state of STEM where you live and work: Missouri*. STEM Content. <http://vitalsigns.ecs.org/state/Missouri/curriculum>. Accessed on February 20, 2018.
6. United States Department of Education. Office of Civil Rights. 2013-14 Civil Rights Data Collection. <https://ocrdata.ed.gov/>.
7. Michael Q. McShane. 2018 Blueprint: Course Access. Show-Me Institute. January 16, 2018. <https://showmeinstitute.org/blog/school-choice/course-access>.
8. Education Commission of the States. *Vital Signs – What is the state of STEM where you live and work: Missouri*. Teachers. <http://vitalsigns.ecs.org/state/Missouri/teachers>. Accessed on February 20, 2018.

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