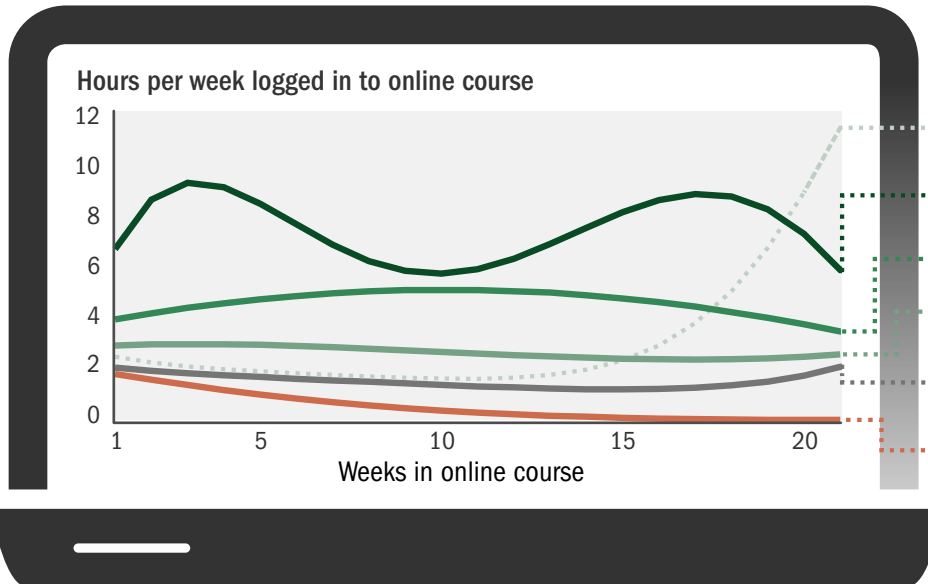


# Students with at least two hours of online course engagement per week have better course outcomes.

**Overview:** REL Midwest and the Virtual Education Research Alliance conducted a study that identified patterns of student engagement in online courses and how these patterns were associated with students' performance in their online courses. The study used anonymous data from Wisconsin Virtual School's learning management system and student information system on 1,512 student enrollments<sup>1</sup> in 109 online Advanced Placement, core, and elective high school courses.

## Students followed one of six engagement patterns:

Student engagement was measured using the number of hours<sup>2</sup> students logged into their online course each week throughout the semester.

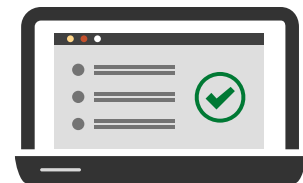
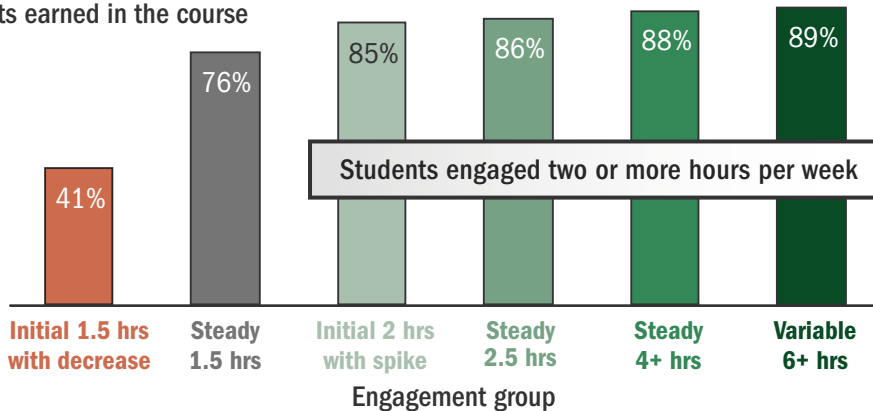


- Initial 2 hours with spike of nearly 12 hours in the final week
- Variable 6+ hours ranging from 6 hours to 10 hours
- Steady 4+ hours per week
- Steady 2.5 hours per week
- Steady 1.5 hours with a slight increase toward the end of the semester
- Initial 1.5 hours with decrease to near 0 hours midway through the semester

## Students' online course engagement predicted online course performance

Student performance was measured as the percentage of possible points earned in the course.

Average percentage of possible points earned in the course



Students who engaged in their online course for two or more hours per week had better outcomes than students who engaged for fewer than two hours per week.

## Interested in learning more about students' engagement patterns and online course outcomes?

Read the Making Connections Report here: [http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL\\_2016147.pdf](http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2016147.pdf)

Read the Stated Briefly report here: [http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL\\_2016147.pdf](http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2016147.pdf)

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## Endnotes

<sup>1</sup> The sample included 1,179 unique students, 333 of whom enrolled in more than one online course.

<sup>2</sup> Hours logged in per week does not include time spent offline on coursework.

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## Data Sources

Pazzaglia, A. M., Clements, M., Lavigne, H. J., & Stafford, E. T. (2016). *An analysis of student engagement patterns and online course outcomes in Wisconsin* (REL 2016-147). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

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## Additional Information

For more information about this infographic, contact REL Midwest by e-mail ([relmidwest@air.org](mailto:relmidwest@air.org)) or by phone (866-730-6735).