

Flipping the World Regional Classroom and Making It Open: Outcomes and Assessment

PRESENTER:

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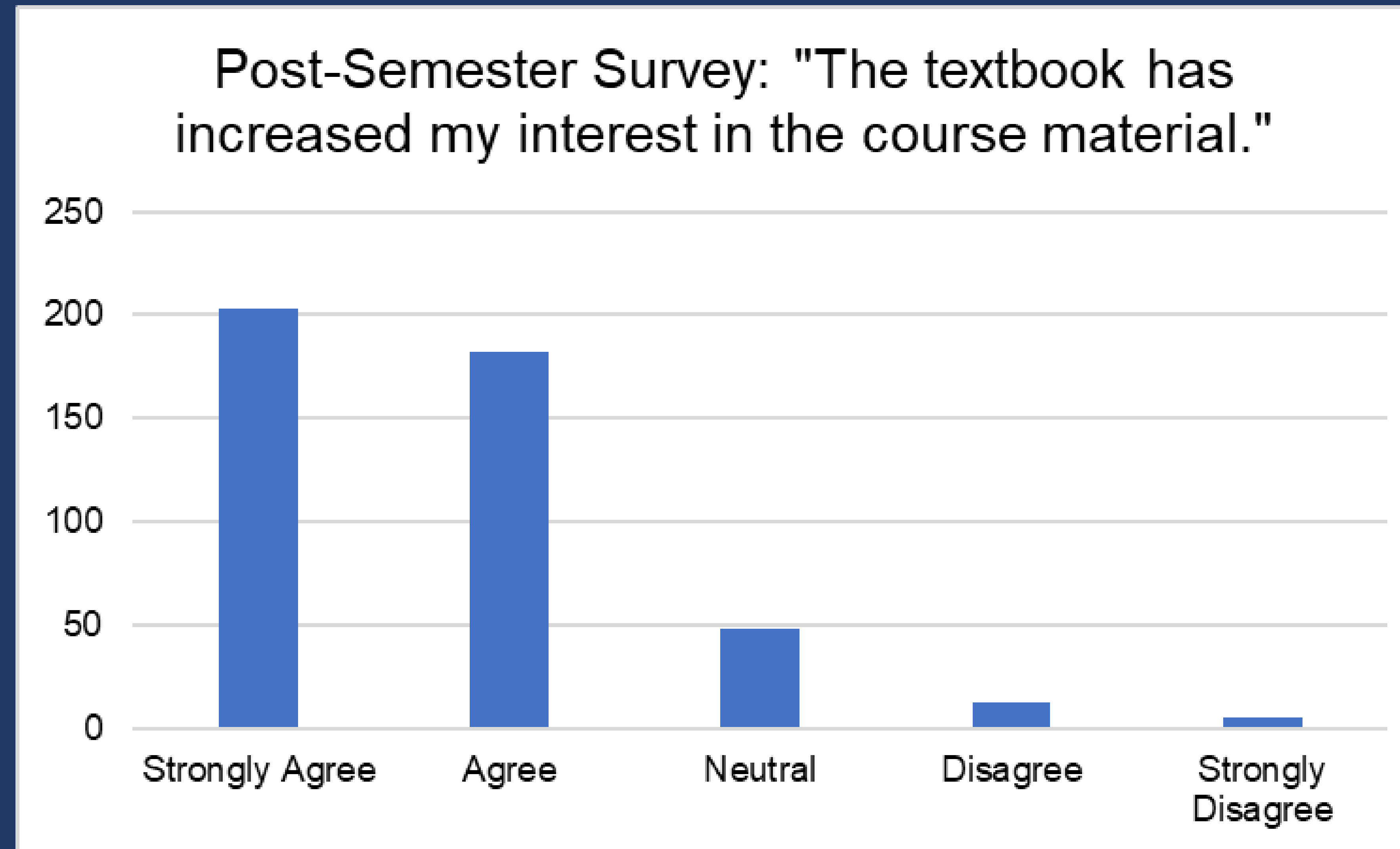
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BACKGROUND: Students consistently achieve the same or better learning outcomes using open materials (Hilton 2019). Weller et al. (2015) indicated that instructors are more likely to innovate and experiment with their course instruction as a result of using OER. Research on team-based learning (TBL) shows a high level of student engagement and satisfaction (Sisk 2011).

METHODS: This open World Regional textbook was first developed in 2016 and significantly revised in 2019. This study began in Fall 2016 and continued through Fall 2019. Students enrolled in GEOG 101: World Regional Geography at UMW were surveyed at the beginning and end of the semester.

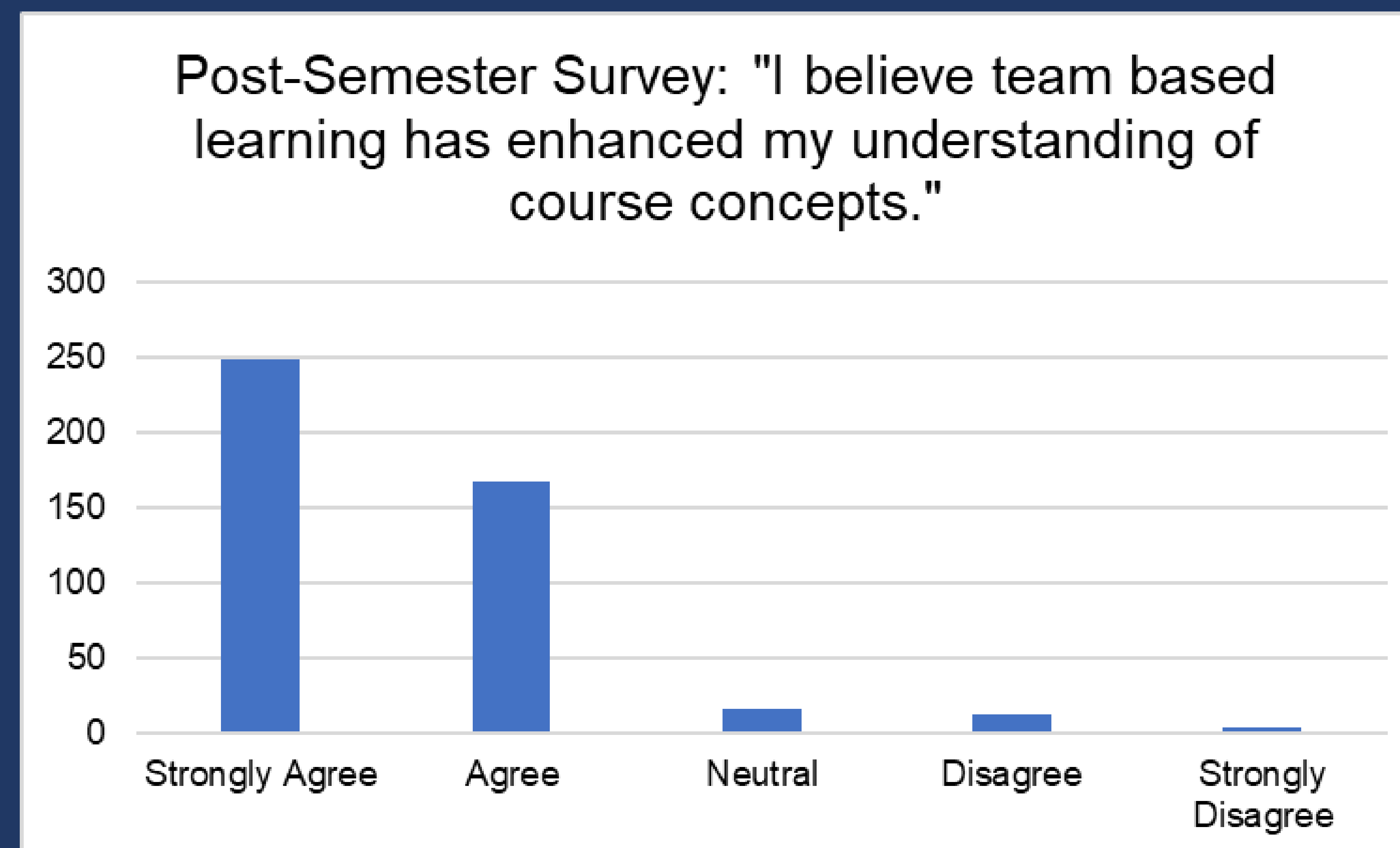
CONCLUSIONS: Continual framing of team-based learning and how it fits within the course goals and connects to Geographic study is critical, as is discussing the benefits of open educational resources. Students who engage in team-based learning and utilize open educational resources in the classroom are more likely to view these tools as beneficial and, importantly, to increase their interest and understanding of the course material.

Using open educational resources and engaging in team-based learning in the classroom has a significant impact on student perception.



92% of students surveyed Strongly Agreed or Agreed

86% of students surveyed Strongly Agreed or Agreed



RESULTS

Comparing the pre-semester and post-semester surveys, students at the end of the semester were significantly more likely to:

- Believe that using team-based learning enhanced their understanding of course concepts ($t=11.426, p<.001$).
- Agree that they understood how team-based learning fit within the goals of the course ($t=10.359, p<.001$).
- Agree that team-based learning is the best way to learn how to think like a geographer ($t=11.698, p<.001$).
- Agree that team-based learning was a more effective way to analyze concepts and solve complex problems than a traditional lecture ($t=10.537, p<.001$).
- Prefer short quizzes over a mid-term and final exam ($t=6.13, p<.01$).
- Rate open textbooks as better than traditional textbooks ($t=5.594, p<.001$).

FURTHER READING:

Finlayson, C. 2020. Opening World Regional Geography: A Case Study. *Open Praxis*, 12(2): 271-282. <https://files.eric.ed.gov/fulltext/EJ1267251.pdf>

Hilton, J. 2019. Open educational resources, student efficacy, and user perceptions: a synthesis of research published between 2015 and 2018. *Educational Technology Research and Development*, 1-24. <https://doi.org/10.1007/s11423-019-09700-4>

Sisk, R. J. (2011). Team-based learning: systematic research review. *Journal of Nursing Education*, 50(12): 665-669. <https://journals.healio.com/doi/10.3928/01484834-20111017-01>

Weller, M., De los Arcos, B., Farrow, R., Pitt, B., & McAndrew, P. 2015. The impact of OER on teaching and learning practice. *Open Praxis*, 7(4): 351-361. <https://www.learntechlib.org/p/161984/>