

2014

Adaptive Teaching in the Classroom

Jared Perkins

Worcester Polytechnic Institute

Mitch Read

Worcester Polytechnic Institute

Evan Stelly

Worcester Polytechnic Institute

Matej Zampach

Worcester Polytechnic Institute

Follow this and additional works at: <http://digitalcommons.wpi.edu/gps-posters>

Recommended Citation

Perkins, Jared; Read, Mitch; Stelly, Evan; and Zampach, Matej, "Adaptive Teaching in the Classroom" (2014). *Great Problems Seminar Posters*. 241.

<http://digitalcommons.wpi.edu/gps-posters/241>

This Text is brought to you for free and open access by the Great Problems Seminar at DigitalCommons@WPI. It has been accepted for inclusion in Great Problems Seminar Posters by an authorized administrator of DigitalCommons@WPI. For more information, please contact akgold@wpi.edu.

Adaptive Teaching in the Classroom

Using L.E.D. (Learning Enhancement Device) to give teachers new techniques

Jared Perkins (RBE), Mitch Read (ME), Even Stelly (RBE), Matej Zampach (ECE)

Advisors: Professor Beck, Professor Traver PLA: Christopher Hanna (CS)

Problem

Kids do not pay attention in class.



Solution

When an L.E.D. is used, teachers can quantify attention and students are encouraged to remain attentive.

Benefits

- Improve attention
- Adaptive teaching

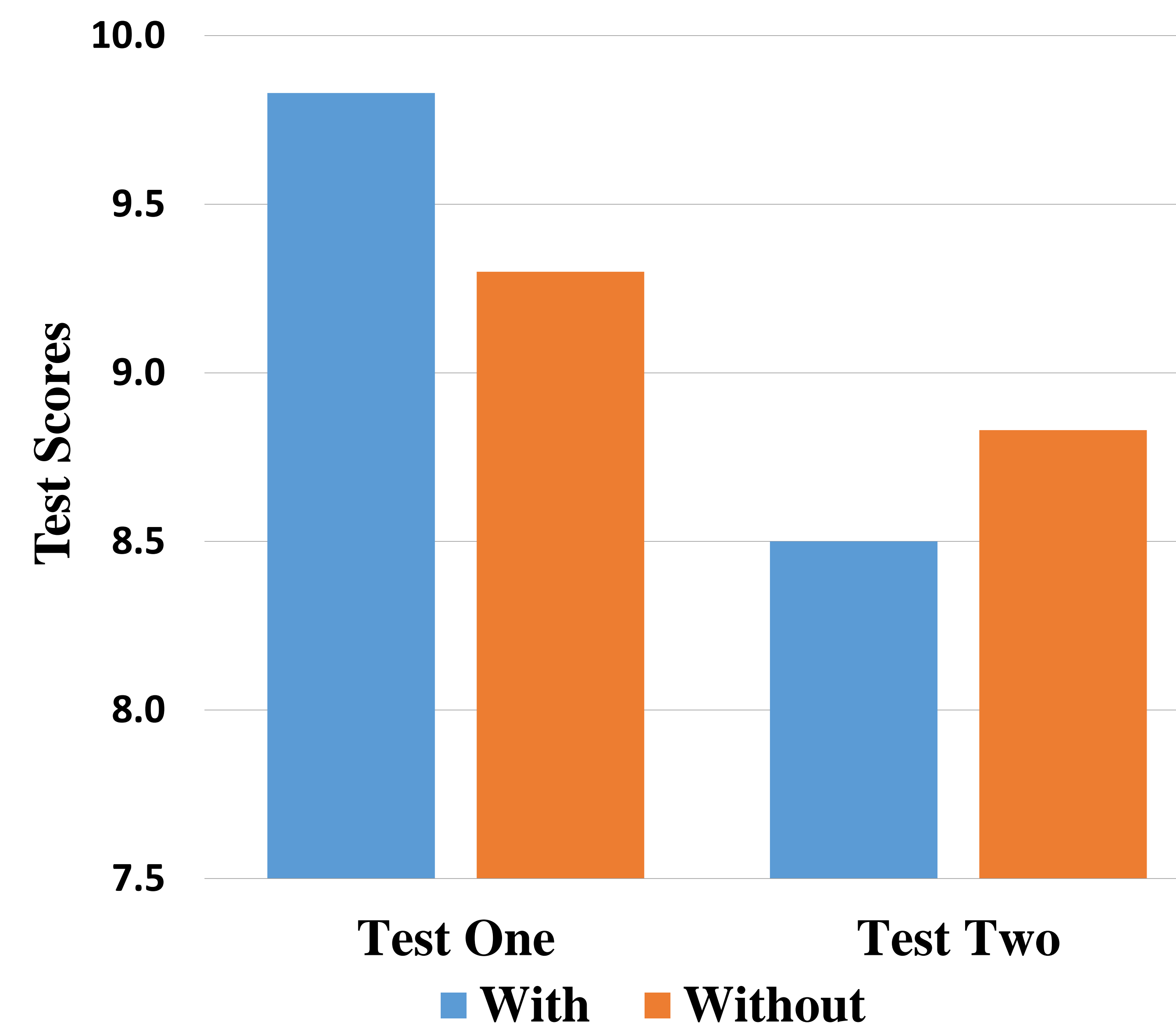
Costs/Cons

- \$3 per unit
- Distraction risk
- Breakable
- Contains small parts

Methodology

- Test L.E.D in Reading Class
- Six students use L.E.D while learning the material, six do not
- When students with the L.E.D hear the teacher say a code word they hit the button
- A test is given after the class to assess student retention of the lecture material
- For Test Two, Students switch conditions (crossover design)

Reading Scores With and Without the L.E.D



Conclusion

Attention increased in one trial, but not the other. For more conclusive results research needs to be done in more diverse classrooms, and with more students. Currently, results are hard to interpret as changes in scores could be affected by the varying difficulty of the tests.

Testimonial

“The device was easily accessible to all students, and the students who were using it were alert and participative.” – Teacher

