

IMPROVEMENTS ON CST STANDARDIZED TEST SCORES FOR STUDENTS USING COLORED OVERLAYS

Olivares, G. and Lopez, S. (2008). The Academic and Physical Effects of Fluorescent Lighting on Light Sensitive Students. Unpublished M.A. Thesis. Concordia University, School of Education, Irvine, California.

ABSTRACT. This study was conducted to determine if there is a correlation between struggling students and a type of processing deficit known as Irlen Syndrome and whether improvements in standardized tests could be attributed to the Irlen intervention of using colored overlays. The sample populations used in this study were students attending two school sites within the Montebello Unified School District. The study conducted involved parents, students, and teachers.

The study was conducted at two different schools with similar socio-economic backgrounds. One sample consisted of one 4th grade English monolingual classroom, and the other sample consisted of students ranging from 2nd through 4th grade English monolingual classrooms.

RESULTS showed significant improvements in both fluency and comprehension as well as in CST scores for students who used colored overlays. Most students' fluency scores increased by an average of 16% with some students having an increase as high as 74% at school A and a 50% average increase at school B. CST scores raised by an average of one band. Students who did not jump a band increased their raw scores.

Students who did not use colored overlays showed only slight improvements in fluency, but little to no improvement in comprehension. The same pattern was noted in their CST scores. Teachers noted that using the overlay not only improved reading fluency and reading comprehension in the classroom, but also helped their motivation and self-esteem.

CONCLUSIONS AND RECOMMENDATIONS. It is our recommendation that each student be given the self-test survey at the beginning of 2nd grade. This will ensure that each student who is struggling is caught at an early age and given intervention as early as possible. Teachers will need to make accommodations for these students such as photocopying tests onto colored paper as opposed to white paper, sitting the student in a dimmer part of the classroom, or wearing a visor in the classroom. It is also our recommendation that the school districts train more teachers to become Irlen screeners; this will ensure each school site has a screener and would be able to screen their students. If this is not possible, then the district should provide a district screener who can travel to each school site to screen students on an as-needed basis.