



CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

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Project Title Ready, Get Set, Move, and Learn	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The goal of my project is to see if students test scores could be improved by incorporating lessons from core subjects such as math and language arts in Physical Exercise (PE). This will make learning interesting and at the same time enable schools to improve their standardized test score without reducing the PE class time.</p> <p>Methods/Materials Informed consent was gathered from 39 third and fifth grade students. Using Parks Le Tellier Modality Indicator survey, students were categorized as visual, kinesthetic or auditory learners. Then students were randomly divided into the experiment group and control group. Both groups were first taught a math lesson in class and their learning was captured with a standard test. In their next Physical Exercise (PE) class, the experiment group practiced some concepts from the same math lesson in their PE. The control group did regular PE and received a usual classroom review of the lesson. After PE, both groups took again a standard test to assess their learning. The same procedure was repeated for language arts.</p> <p>Results After PE the improvement in the average math score for experiment group (those who participated in lesson incorporated PE) is 23%, while for the control group it is 10%. In language arts the improvement in test score for the experiment group is 24% and for the control group it is 3%. All three types of learners (visual, kinesthetic, and auditory) in the experiment group did significantly better in the tests after participating in a core lesson incorporated PE.</p> <p>Conclusions/Discussion The results agreed with the hypothesis. Students in experiment group who participated in core lesson (from math and language arts) incorporated PE did significantly better in tests than students in control group who did regular PE. This proves thoughtfully combining classroom lessons in PE can help students to be healthy and excel in their academics at the same time. As all three kinds of learners (visual, kinesthetic, auditory) benefited from core lesson incorporated PE, this approach can be helpful for all kinds of learners in a class.</p>	
Summary Statement Incorporating lessons from core subjects such as math and language arts in physical exercise can help students to improve their test score.	
Help Received Science teacher helped with procedure; Parents helped with presentation board	