



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> <b>Harrison J. Trubitt</b>	<b>Project Number</b> <b>J0322</b>
<b>Project Title</b> <b>Can Performance Be Improved with Words of Encouragement and Goal Setting Moments before a Competitive Swim Race?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective is to see if and how goal setting and encouragement affect a competitive swimmers race.</p> <p><b>Methods/Materials</b> 266 swimmers were randomly selected at two swim meets. The swimmers were sorted into three different groups, control, encouragement, and goal setting. The control group was #ignored# as they approached the starting blocks, while the encouragement group was told by the timer, #good luck you#re going to do great!# In the goal setting group, the swimmer was given a goal; set dependent on what length event the swimmer was swimming (100 yards= 3 second goal, 200 yards= 4 second goal, etc.). The average percentage of time dropped by each test group was determined and compared.</p> <p><b>Results</b> The fastest overall group was the control group with a 2.4% time improvement. When outliers (time with a percent drop of more or less than 9 percent) were removed, the fastest test group was the control, with a 1.5% improvement. The next fastest group was the goal setting group, with a 1.6% improvement, and the encouragement group had a 1.5% improvement. However, if outliers are removed, the second-fastest group was the encouragement group (1.1% improvement) and the goal setting group was slowest (0.7% improvement).</p> <p><b>Conclusions/Discussion</b> In the sport of swimming, one of the best tools is concentration. As the results showed, the control group was the fastest group, in which the swimmers were #ignored#, where their concentration was not broken and the subjects were focusing on their race. The hypothesis in this experiment was that swimmers would improve their time by at least 2-3 seconds if there was no goal set, and if there was, the swimmers would meet that goal. Goal setting may only be helpful over a period of time or when set by a coach.</p>	
<b>Summary Statement</b> The experiment tested if goal setting and encouragement moments before a competitive swim race affects a swimmers time positively or negatively.	
<b>Help Received</b> Mother helped write down trials; Photography from Cole Knight; timing lane arrangements from Patton McClung and Sue Parnes	