**Assent Form**

**Study Title:** *Relationship between problem solving strategies and brain hemisphericity in High School students.*

**Institutional Review Board Approval Number:**

Hello, my name is Erin Oliver. I am currently a student teacher, from Texas State University, placed at Clear Creek High School. This semester I will be conducting research in your advisory classroom for my Undergraduate Honors Thesis.

The anonymous results of this study will be used to help establish if a relationship exists between the methods students use to solve math problems, and the side of the brain in which they test dominant. The human brain is split down the middle into two sides, each of which specializes in certain tasks. These two sides are connected by the corpus callosum, which runs down the middle and acts as a bridge between the two sides. Some individuals test to be more left brain dominant, right brain dominant or some show more of an integrated dominance. The results of this study could eventually help teachers to improve individual student instruction and raise achievement.

The study will consist of three tasks for you to complete. The first task is simply a demographic questionnaire. The demographics that will be collected are as follows: age, gender, ethnicity, mathematics experience, parents’ education, graphing calculator experience and favorite subject. The second task is the Style of Learning and Thinking Questionnaire, developed by Torrance, McCarthy and Smith (1988). This is a 28 question survey which helps determine your brain dominance. Some sample items from the survey are provided below:

*Place a check mark in the blank if the statement is true of you. You may check one or both of the statements in a pair or neither – whatever fits you.*

\_ I tend to solve problems with a playful approach.

\_ I tend to solve problems with a serious, business-like approach.

\_ I like to express feelings in plain language.

\_ I like to express feelings in poetry, song, dance, or art.

The third task that you will complete will be to solve a mathematical word problem. Achieving the correct answer to the problem is not the point of interest. Rather, we are interested in observing the specific methods you choose.

This study is completely voluntary. If at any time you choose not to answer a question, there will be no discrimination towards you in any way. Refusal to participate in this study will not affect your relationship with Texas State University. To maintain anonymity, no names or identifying information will be collected during this study. All data records will be securely held by me, Erin Oliver, through analysis, and will be

discarded after May 15, 2009. Results of the study will be made available upon request. If you have any questions regarding the study, or would like to withdraw yourself from the study please contact me through the contact information provided.

This study will take three small portions of your advisory over three weeks. Willingly accepting the surveys during the next two advisory classes, will affirm your willingness to participate in this study. If you should choose not to participate, you will remain in class to complete other work. Please indicate your name below if you would like to volunteer to be interviewed after the study has taken place. This interview will contribute to the research and would be greatly appreciated. Thank you for your cooperation.

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ would like to be contacted to participate in a follow up interview.