English Vs Math Essay, Research Paper

English Vs. Math

To most people English or Language Arts is a creative course and math is just a logical, you get it or you don t class. My purpose writing this paper is to change your mind. I believe that Math is just as, or more creative than English. I will demonstrate this through a couple of examples.

First, we must understand what is behind the creative aspect in English. Most people consider that English is the, creative, subject because of titles such as creative writing and creative thinking and in contrast there is no creative something in math. In English when we are, let s say, going to write a creative short story we use our imaginations and there are no limits. Now on the other hand in math when faced with a problem such as; if you have 300 meters of fence and have to enclose a rectangular field. What would be the dimensions of the field that would yield the largest area? When mathematicians go to solve one of these they have to be creative in their problem solving.

Perhaps, one of the best ways to demonstrate creativity in math is through an identity question. An identity question is where you have an equation and you try to manipulate each side individually without touching the other side and get them to be equal. We start off with something like sin squared theta over cos theta plus cos and the objective here is to prove that it is identical to sec theta. At first looks there is no connection but by using creative methods and hours of work eventually we figure out the way to do it.

SinX? + Cos ? | Sec ?

Cos ? |

First I would make everything over Cos ?

SinX ? + CosX ? | Sec ?

Cos ? |

Then I would apply a law

1 | Sec ?

Cos ? |

Then a simple law

Sec ? | Sec ?

You can prove that it is creative because a computer can t solve this equation, (a computer thinks logically). Technically a computer could solve this equation but it could just tell you if they were equal and not to the same level of accuracy. A computer would input a value for ? on both sides and if the answer is equal then the equation is equal. The problem with this is that when you get into trigonometry there could be a difference in the decilionth decimal place. A computer can t work with the abstract which is what is in my example. A computer may take 2 seconds or a million years to find an answer or it may give the wrong answer! The other point is that a computer can only perform things in a certain order it can t guess or have a feeling about a question, which brings in the creative aspect.

Another example happened during one of my Calculus classes that I believe to be the most abstract and creative of the maths. A fellow student and me figured out pie. We figured out that the integral from 0 to1 of the square root of x minus 1 is equal to half of pie. We had huge problems figuring out this equation but persistence eventually won out and we solved it. Later we found out that this was a University Calculus level question and we shouldn t have been able to solve it due to our lack of skills in this area. Creativity then can be the only culprit for our derivation of the solution.

Finally one of my strongest points is that on some of the more creative math units the more creative people usually the artsy type do a lot better than in the other units and by no means because these units are easier. Remember that I am not saying that English isn t creative, just that Math is more creative than anyone gives it credit for.