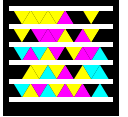




## Conceptual Art Project

Amy Callahan, Math, High Tech High



When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art.

—Sol LeWitt, conceptual artist

Each student designed a unique art piece using a set of mathematical concepts. Students then followed their own directions to create their piece on a canvas. The class then chose 11 of these pieces to enlarge on the wall, demonstrating that in conceptual art, the original artist need not be the one to execute the piece. By following their classmates' instructions and images, the students were able to realize perfectly their classmates' concepts.

### Teacher Reflection

I had three main goals for my students: to strengthen their ability to explain their mathematical thinking, to practice math concepts they had learned so far, and to gain exposure to a new art form. While creating a design was somewhat challenging, students struggled most with composing clear directions for their designs. It took many drafts to make directions that were clear, concise and correct. This was a great exercise in proof: how could they know that their directions would produce exactly their design if followed by someone else? It was a nice surprise just how rigorous this component of the project became.

### Student Reflection

My partner and I created a piece called “Tree of Lines,” using simple lines and angles to create a tree. The concept was simple, but if someone else were to re-create our piece it might be harder than it looks. I learned that math can be explained through many different forms and concepts. Through art it was more exciting, yet still challenging. Having someone else re-create our art on a wall instead of seeing it on a small canvas definitely made us very proud of our work.

—Yleana Cueva, 11<sup>th</sup> grade

To learn more, visit [www.hightechhigh.org](http://www.hightechhigh.org) and Amy Callahan's digital portfolio at <https://sites.google.com/a/hightechhigh.org/amycallahan/>

