

The Pi Day Event

On March 14, many schools celebrate Pi Day. For those who may not realize, recognizing Pi on 3/14 is due to the fact that this number is approximately 3.14. While various schools and classes recognize Pi Day in an assortment of ways, “The Pi Day Event” for all of Mr. Peters’s math classes involves Geo Art (art with geometry-based curves and shapes). On Pi Day, students use string-and-chalk “compasses” to create these beautiful works of art on the sidewalks outside the school. After making the outline, students color them using decorative chalk. But this has not always been the case; progressing to this special, one-day lesson was a metamorphosis that took place across several years.

How the Pi Day Event Began (Blame it on Basketball!)

How did Pi Day begin, as celebrated in Mr. Peters’s classes? It was his first year teaching high school Geometry, in the fall of 2002; the setting was a private school in the San Fernando Valley of California. The Pi Day Event entered its inception one day when Mr. Peters went outside to observe playground activity and found himself pondering how to “finish” the semicircle which formed “the top of the key” on the basketball court. Making this semicircle into a full circle would take something like a compass only much larger. That day, the string-and-chalk compass was born. We might all chuckle at the results those first few classes got when producing their artwork in this setting: the chalk was plain and either yellow or white, and Mr. Peters had not yet developed his in-class Geo Art lessons that truly prepare students to be successful many months later on Pi Day. But it was a start. (And we did complete the semicircle as well as decorating it with a six-petal flower.)

Some years later, at another private school in Arizona, Mr. Peters began to teach Geo Art and to incorporate this into all of his mathematics courses (Geometry and otherwise). Months later, all classes were then prepared to take the foundational work from Geo Art and apply that outside when making their larger-than-life circles on Pi Day. But the Geo Art was originally introduced to all math students after attending a seminar which featured critical thinking and problem solving. That day-long program brought forth this realization: creativity and critical thinking may be viewed as opposite sides of the same coin—the coin of problem solving. While many may not consider it, problem solving requires creativity. Generally speaking, the more creativity one cultivates the more that person will be equipped to solve enigmatic difficulties. It is not recalled if the critical thinking seminar previously mentioned cited Leonardo DaVinci, but he has become Mr. Peters’s prime example over what can occur when “creativity meets problem solving:”

<https://oneamazingsubject.weebly.com/creativity--problem-solving>

Recorded History

The above discussion briefly details the quiet and unrecognized beginnings of something that would progress into a major event: the Pi Day celebration has not only proven to become a favorite lesson amongst the students as well as their teacher, but it often forms a day of life-long, wholesome memories in the minds of many students. On Pi Day, students meet outside (FIELD TRIP!) and begin by making string-and-chalk compasses. With these simple tools, students typically draw larger-than-life circles and rosette/flower designs on the sidewalks or concrete play areas. After the outlines are completed, students then beautifully color their work as “the icing on the cake,” the finishing touch. The goal is to make designs which are nearly as stunning as the ones done earlier in the year on paper (our in-class designs are usually colored with wooden pencils). But it is far easier to do this using a regular compass on a piece of paper, while sitting in a chair, at a desk:

When two students pair up and, together, rotate a string-and-chalk compass which has a 2-3 foot radius (or maybe even longer), the result is a huge circle with an equally huge flower design inside. To make these designs with a human-driven, string-and-chalk compass, and then to beautifully color them all in one class period, is a momentous feat.

Every year, the designs seem to get better and better as students are “challenged” by the great art work they see from those who traveled this road before them. You are invited to take an historical tour of past Pi Day events by visiting these 3 links on Mr. Peters’s google e-storage:

Pi Day 2016: <https://goo.gl/photos/3XGig8MiT9hSMQPo7>

Pi Day 2017: <https://goo.gl/photos/LtwP3dMAbuUnDEwx9>

Pi Day 2018: <https://drive.google.com/open?id=1YbF61bo7xiazD5W0PQUFTVQBEIwf8yMb>

Along with various forms of artistic expression, parents and students are further encouraged to make music an integral part of their approach to successful learning at the highest possible levels:

<https://oneamazingsubject.weebly.com/your-brain-on-music.html>

Yours in education,

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