

Math Adventure Book

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I can remember as a little girl, admiring my great-grandmother's paintings and wondering how she created such beauty with her dainty, yet frail hands. Dainty, yet frail hands that miraculously I inherited from her and am able to fashion my own, unique works of art. I started with simple drawings of birds like my Mimi used to draw, and the further I explored my artistic talent the more I started to find my own style of drawing and painting. I found that I was exceptionally well at looking at any image from a picture, television show, or movie and recreate that exact image just by observing it. Once I realized what I could do, I decided to draw scenes from the most inspirational films produced of all time, Disney films. I loved seeing my favorite moments from Disney movies come to life as I sketched well-known characters that influenced my life.

I have found multiple ways to incorporate my drawings in several of my projects throughout my education to make my assignments have that extra "wow" factor. This semester, in my grades 4-8 literacy methods class, one of the assignments that we were assigned was a genre study project. The point of the assignment was to have future teachers select a genre of our choosing like media, picture book, song, etc., and create whichever form of genre we chose based on selected grades TEKS from our con-

tent area. As soon as she told us about the assignment, I immediately thought of the amazing Disney film, *UP*. I remembered how they made this grand adventure book together that had pictures and mementos of the places they had traveled, and the places they wanted to travel taped and pasted inside. I imagined that on every page we would travel to a different country in the world and solve a word problem, which aligned with the 8th grade TEK I chose, TEK 8.1a. At first, I was going to just base it on Mr. Frederickson and Russell going around the world solving math together, but then I decided to spice it up a little bit and incorporate Disney characters from several different films and visit them in the country that they are from and solve a math problem that they have developed. I also thought for a moment that this project might be too much for a student to recreate, but then I remembered Walt Disney's famous words, "Whatever you do, do it well. Do it so well that when people see you do it they will want to come back and they will want to bring others and show them how well you do what you do." Disney.

Why a picture book is vital a tool in mathematics?

Visual aids like picture books can be a very beneficial tool for teachers in the mathematics classroom who have students who are spatial or visual learners. “They can spark students’ math imaginations in ways that textbooks or workbooks don’t. Connecting math to literature can boost confidence for children who love books but are wary of math” (Burns, 2015). Teaching with visual representations helps students dive into high order thinking skills and can help them better analyze text or writing. Creating a math adventure book will assist students in visualizing and interpreting word problems and depicting how word problems can be expressed through visual representations to help students comprehend the content further.

How to make a Math Adventure Book?

This assignment entails students recognizing problems in several situations, assessing the problem, finding the solution, and checking the solution. To create the book you will need a scrapbook album and manila and colored paper. The first thing I did was make the manila paper look aged by blotting coffee grounds on the paper so it would resemble the book from the film, *UP*. While I waited on the paper to dry, I typed up all of the word problems with their solutions and found ways to incorporate details from each Disney film into the word problem, like for example, on Pocahontas’ page we are trying to find the dimension of the hole that John Smith is trying to dig to find gold. Then, I cut out all the word problems and solutions, then pasted them on to colored paper and glued them into the scrapbook. I then decided to give my scrapbook a dash of creativity, and I drew each Disney character from the word problems on every page, but students could just put in pictures of

the characters if they want. I also added stickers and other decorations to further attract the readers and have them more engaged in the word problems. If I were to assign this as a project in my future classroom, I would make it a project that they students create throughout the year. Creating the book throughout the year will help students to see how you can illustrate any mathematical operations or questions into word problems that could arise in everyday life or society. The students will require a guide in order to properly set up a word problem and its solution, which the teacher will provide for them with the following steps:

Word Problem:

- What do you want in your word problem?
- What are you solving for?
- Include words that define the operation that you are having to solve.
- Does it make sense? If you were given this problem could you solve it?

Solution:

- Identify the Problem
- Devise a Plan
- Implement the Plan
- Review

By the end of the year, students should be able to conquer word problems with any mathematical operation easily. This project should boost student’s confidence in comprehending and answering word problems. Overall, I consider the Math Adventure book a very beneficial tool for any math teachers to have or create in their classrooms.

References

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Author's Biography

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Appendix 1



