

Appendix 1: Implementing Teaching Standards

Math:

Number and Operations-Fractions

- **CCSS.4.NF.A.1-** Show what a fraction is by defining each part, ex. Numerator and denominator, halves, quarters, thirds. Provide visuals to express by what a fraction represents.

Operations and Algebraic Thinking

- **CCSS.4.OA.A.1-** Show what each part of a multiplication and division problem are by defining the many different frequent words, ex. Product, factor, divisor, dividend, quotient, and array.

Measurement and Data

- **CCSS.4.MD.A.3-** Show different units of measurement by expressing the size in comparison to other units. Show and differentiate between perimeter and area.

Literacy:

Writing

- **CCSS.W.4.2-** Create and express a topic to show what each vocabulary word represents.
- **CCSS.W.4.4-** Create a student friendly dictionary to help define common math terms used throughout the school year.
- **CCSS.W.4.7-** Research and discover what terms represent and how to express them to peers for them to understand.

Speaking and Listening

- **CCSS.SL.4.1-** Students will work cooperatively and discuss the topics being learned.
- **CCSS.SL.4.4-** Report their word to their peers for them to learn what they have created. Students will teach each other on the topic being presented.

Reading: Informational Text

- **CCSS.RI.4.4-** Students will interpret and define academic language to student friendly versions.

Resources, and Readings:

The 7 Habits of Happy Kids by Sean Covey and Stacy Curtis- This story introduces and informs students and teachers on habits that successful and happy kids and adults do to become successful.

[http:// amathsdictionaryforkids.com/](http://amathsdictionaryforkids.com/) is a website that provides an online version of terms and examples of ways the students can outline their term. It provides real world examples and interactive use of the term.

School Reform and Standards-Based Education: A Model for English-Language Learners by Jana Echevarria, Deborah Short, and Kristin Powers and *Using the SIOP model for Effective Content Teaching with Second and Foreign Language Learners* by Veronika Karevawas were readings used for teaching the SIOP model. It provides teachers with activities and outlines the benefits on teaching the SIOP model to ESL students and native language speakers.

IRubric: Math Dictionary Rubric was a site that provided the rubric used above.

Writing, Mathematics, and Metacognition: Looking for Connections Through Students' Work in Mathematical Problem Solving by David K. Pugalee, *Using Writing Mathematics to Strengthen Student Learning* by Vicki Urquhart, and *Writing to Learn Mathematics* by Franco Vivaldi were readings used to relate the importance of math and writing to learn math.

<http://math2.uncc.edu/~hbreiter/>. Was the website of our seminar leader and professor Dr. Reiter. It provides explanations used during our seminar and used to explain Martian Math and importance of place value.

www.teacherspayteachers.com a website that was used for getting the KWL chart. On it is a bunch of ideas for teachers to use and post ideas to share.

<http://www.dailyteachingtools.com/free-graphic-organizers-s.html> was a website used to get graphic organizers students can access and change to what I needed to

Works Cited:

Covey, Sean, and Stacy Curtis. *The 7 Habits of Happy Kids*. New York: Simon & Schuster Books for Young Readers, 2008.

Covey, Stephen R. *Living the 7 Habits: Stories of Courage and Inspiration*. New York: Simon & Schuster, 1999.

Eather, Jenny. "A Maths Dictionary for Kids 2015 Full Site by Jenny Eather ..." A Math Dictionary for Kids. 2001. Accessed October 31, 2015.
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Kareva, Veronika. "Using the SIOP Model for Effective Content Teaching with Second and Foreign Language Learners." *Journal of Education and Training Studies*, 2013.

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Urquhart, Vicki. "Using Writing in Mathematics to Strengthen Student Learning." 2009. Accessed October 31, 2015. http://mrwaddell.net/blog/uploadpics/Made4MathReading--writing-in-Math_B748/Writing_in_mathematics.2011.pdf.

Vivaldi, Franco. "Writing to Learn Mathematics." *MSOR Connections*, 2003, 29-30.