Exploring a Conceptual Model-Based Approach to Teaching Situated Word Problems

The author in the article was trying to study how students in grades three through five who were at risk in mathematics would react to a new word-problem solving method. The students were described as at risk if they scored below thirty percent on the Key Math Revised Normative Update (KMRNU) problem-solving subtest. The intervention strategy that was used was the Conceptual Model-Based Problem Solving or COMPS teaching strategy designed by Yan Ping Xin that emphasizes the representation of mathematical relations in equations for solutions. “Specifically, the purpose of the present study was to further explore the COMPS approach to teaching situated word problems and to assess the effect of the intervention on improving students' pre-algebra concepts and skills” (YAN PING XIN and DAKE ZHANG, 429). The Authors stressed that giving the students multiple examples was better than giving a model such as “factor X factor = product” because it allows the students to apply them to more situations. The results of the study showed that the three students that were introduced to the COMPS approach show marked improvement. This applies to my teaching in that it shows that there more than one approach to teach word problems.

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| Xin, Y. P., et. al., [Exploring a Conceptual Model-Based Approach to Teaching Situated Word Problems](javascript:%20void%200). The Journal of Educational Research (Washington, D.C.) v. 102 no. 6 (July/August 2009) p. 427-41 |

Effects of the TOUCHMATH Program Compared to a Number Line Strategy to Teach Addition Facts to Middle School Students with Moderate Intellectual Disabilities  
The authors of this article are Dale Fletcher, Richard T. Boon and David F. Cihak. The purpose of this study was to replicate and extendon the use of the "touch point" strategy to teach addition problem-solving skills to students with moderate intellectual disabilities at the middle school level. In addition, a secondary purpose of this study was to compare the effectiveness and efficiency of touch points and number lines for teaching single-digit addition problems to determine if there are functional differences between the two strategies for students with

moderate intellectual disabilities. The middle schools students were students with mild intellectual disabilities named Ken, Robert, and Ashley. The three students were taught the “touch-point” strategy and the number line strategies. The study found that three students were more likely to use the touch-point method and at a faster rate than the number line strategy. The number line strategy would be my first choice to teach certain mathematical concepts and it is nice to know that there is another strategy that is more efficient and easier for students to use.

Fletcher, D., et. al., [Effects of the *TOUCHMATH* Program Compared to a Number Line Strategy to Teach Addition Facts to Middle School Students with Moderate Intellectual Disabilities](javascript:%20void%200). Education and Training in Autism and Developmental Disabilities v. 45 no. 3 (September 2010) p. 449-58

Lets Play Mancala and Sungaku! Learning Math and Social Skills Through Ancient Multicultural Games

The article authors (Rey E. de la Cruz, Cheryl E. Cage, Ming-Gon John Lian) make the case in the article that students with learning disabilities have trouble understanding mathematical operations and calculations and have problems developing social skills. One idea that that authors came up with was to use the traditional games of Mancala and Sangaku. The article’s authors suggest that the games be modeled by two students and that the students should conduct research on the history of the two games to understand how the rules differ between countries. Some of the benefits that the teachers have found are instructional strategies related to: mathematical concepts; memory, observation, and concentration; face-to-face social interaction; fine-motor skills; cooperation and competition; multiculturalism, and teaching strategy. These games could be used in my classroom as a fun way to teach math concepts or cultural diversity or both.

Cruz, R. E. d. l., et. al., [Let's play mancala and sungka! Learning math and social skills through ancient multicultural games](javascript:%20void%200). Teaching Exceptional Children v. 32 no. 3 (January/February 2000) p. 38-42

Support for Families of Children with Disabilities

This website is for the organization Support for Families of Children with Disabilities based out of San Francisco, California. All of the organization’s services are in three languages: English, Chinese, and Spanish. There is also a monthly newsletter that can be found on the website. The website also features the mission statement and objectives of the group. The organization was founded in 1982 to provide parent to parent support for families of children with disabilities. There is also a link on their home page were donations to the organization can be made. This website would be helpful for me to learn more about my students who have disabilities so that I can interact with their families better and teach the student better.

*Support for Families of Children with Disabilities*. 2010. Web. 28 Nov. 2010. <http://www.supportforfamilies.org/index.html>.