**Statement of the Purpose**

Teachers must provide opportunities for success to all students. Every student has a unique learning style. Students who receive special education services have a plan in place to identify the type of support(s) that are needed for them to be successful in the general curriculum. One type of support is an accommodation, which is a change in how the curriculum is being presented which helps a student overcome his/her disability. Another type of support is a modification, which is a change in what is being taught to or expected. Regular education and special education teachers are mandated to provide accommodations and modifications to students with disabilities as outlined in their Individualized Education Plan (IEP).

After having served in the elementary school setting as a general educator for several years, I have come to learn that there is an extreme need for differentiation in the classroom. In order to be an effective teacher I work with small groups in reading and math. So to differentiate instruction in math students needed to be taught that math isn’t magic, there is reasoning behind it. This year, our campus adopted Singapore math. I wanted to see what impact this would have on classroom teachers as well as the improvements that it would make upon my first grade student’s learning experiences. I was responsible for helping implement the program as well as track the data and survey teachers on their thoughts concerning the program.

**Strategies Used To Invite Participation**

Strategies used to invite participation and support for this project includes a survey sent out to teachers via survey monkey and a curriculum set forth by Singapore Math. Support groups include the campus staff and the educational diagnostician.

**Professional Growth Needed in Order to Complete the Project Tasks**

Professional growth needed for me to complete this project includes the study of Singapore Math and how it is best implemented. I studied the curriculum as well as spoke with teachers who had previously used this method to see if this is a curriculum we should implement school wide.

**Resources**

The resources needed for this project are a survey and the curriculum of Singapore Math. Also, This is the link to the survey I conducted for teacher opinions on Singapore Math. I decided to make it short and to the point considering the staff’s busy schedule.

**Materials Needed**

The materials and information needed can be found on a link in my portfolio online. The Singapore Math method is extensive and hands-on. In my time conducting my practicum I was only able to use a limited amount of the curriculum.

There were various manipulatives used but also manipulatives that children built throughout the study. For example, students built their own base ten sets called “bean sticks” where they glued 10 bean sticks to popsicle sticks to construct their own sets of 10’s.

**Possible Project Impact**

The Proposed Project’s strategies are important factors in increasing student achievement. The project in question may have a very positive impact on the achievement levels of math across the grade levels. Students may have a decreased difficulty in math. This therefore reduces the need for intervention and could be preventative in students struggling with math concepts. Students will be serviced far more quickly because Singapore math uses formative assessment and hands-on activities to monitor student learning and meet their needs.

**Review of the Literature**

 “More time is spent on fewer units. The textbooks have been replaced with thinner ones chock full of bright pictures. And students are raising their hands like never before.” This is the transformation of a classroom implementing Singapore Math. Singapore math is proven to engage students and boost their performance. It makes math fun again. Singapore math also focuses on “promoting a deep understanding of numbers and math concepts” which typically means fewer math concepts are covered but in greater depth than in a traditional U.S. classroom. Students are taught through a pictorial approach. Through Singapore, students are split up into classes based on their mathematical abilities. Teachers teach the lower-ability groups at a slower pace and are more repetitive. Students in Singapore math have repeatedly ranked at or near the top on international math exams since the mid-1990’s.

 Schools are constantly trying to improve math skills, leaving them to chase one math curriculum after another, hoping to boost student achievement and address differentiation with success. Though Singapore math may be a fad, it does address the fact that all children learn differently. It devotes large amounts of time to basic concepts to ensure the fact that students understand math in depth. Taking time to teach concepts gives students a more solid foundation to sit upon. This allows them to build increasingly complex skills and it makes the concepts stick. With this math program students can also accelerate as much as a year ahead of students in their classroom. Singapore math is also said to be a perfect combination of visual representations and critical thinking.

 Looking at test scores, recent research suggests that students who are taught Singapore math “score higher on standardized math tests, and in anecdotal reports, teachers say it helps even young children to develop confidence in their math abilities”. Most any child can benefit from this program. Students are not going to just understand the how, but the why.

 (Links to references included in portfolio site)

**Survey Used**

<https://docs.google.com/forms/d/1-9htq6j6FnMs4LB6sh773Bf6HnNk9covhyNo1KMp96g/viewform?usp=send_form>

**Evaluation of the Project**

After analyzing the responses from the survey conducted, I have come to determine that implementing Singapore Math School wide would be a beneficial decision. The below average percentile of students decrease and the average percentile increased. This improvement will in turn reflect on the campus report card data and will help the school improve their SPED data indicators on the PBMAS. In conclusion, the addition of the Singapore Math program will be very beneficial for students and staff. If this new curriculum gets implemented the school will obtain a high probability of increasing their student success.

**Reflection**

After having completed this project, I have come to understand the importance in conducting surveys; the relevance that implementing a new curriculum has on test scores and the impact differentiation has in the classroom. This activity was very beneficial and gives me more ideas for future use with my future career. I very much enjoyed analyzing data. Although not all of our scores are back at this time, I have already seen an improvement in my classroom. I am also excited to see 3rd through 5th grade implement this program. The completion of this project has given me great insight on the importance of teamwork and great communication. It has also given me great insight on being flexible to new concepts and programs. Singapore math proved to be a wonderful tool to use in the classroom. Not only do our students now I have a deeper understanding of math concepts but they have a higher motivation and excitement as well.