

Mentee: Alex Smith (*Name changed to protect anonymity*)

Mentor: Heidi Hutchison

Date: April 4, 2015

Re: Summary of Observations

Background:

Alex Smith is new to Friends School as a fourth and fifth grade math teacher. However, she is familiar with the culture and academic program of our school because she has been a substitute teacher at Friends School for approximately three years. In addition, Alex's father, Peter Smith taught at William Penn Charter and her grandfather, Edwin Smith was Head of School at Baltimore and Sidwell Friends. She is quite familiar with Quaker culture in our school. Although Alex was a teacher at Calvert and Grace and St. Peter's, she had been out of the classroom for approximately six years.

Alex and I began our relationship as colleagues in late August 2014. We both teach 5th grade math to primarily homogeneous groups. However, Alex began the year teaching struggling math students. She now teaches the high achieving middle group and I teach the high achieving group. We both use Math in Focus which is a Singapore-based approach. During the fall and beginning winter months, we had frequent discussions during team meetings and individual meetings between the two of us that focused on differentiation strategies and supplementing the Math in Focus program with other materials. It is important to note that we are both new to teaching Math in Focus.

Goals:

In September, I asked how I could help Alex with her teaching throughout the year. She stated she wanted to learn the new Math in Focus program and incorporate technology into her lessons. She also desired to observe other teachers teaching math in order to get a better feel of how math is taught in different grades and homogeneous groups.

Timeline:

August-November:

Weekly team meetings were attended by both mentee, Alex Smith, and mentor, Heidi Hutchison which included topics such as: struggling math students, approaches to differentiate lessons, incorporate technology such as Khan Academy, Greg Tang game-based skills practice, iPad Apps such as Educreations, ShowMe, and Explain Everything, appropriate SmartBoard lessons, as well as strategies to incorporate additional word problems that were more cognitively demanding.

December-February:

Alex began teaching the high-middle achieving math students. As a result, it became easier for us to co-teach more frequently. We continued to plan together and discuss: struggling students, approaches to differentiate lessons, and different ways to incorporate technology in order to increase student engagement. We also began to focus our discussions on how to differentiate our lessons for specific students with severe ADHD and/or anxiety.

Alex exhibited a high level of skill in creating activities where students could move around and learn at the same time. Students often were able to practice their math skills by playing games that integrate skills, logic, and strategy, by using their drawing/illustrative skills and by working together collaboratively in groups. Alex allowed students to stand if they needed to move around and she also allowed students to take frequent breaks.

March-April:

Alex and I began a more formal process of mentor/mentee relationship in March. We scheduled a combination of observations that included: observation of Alex and another teacher co-teaching, Alex and I co-teaching together, Alex teaching by herself, Alex

observing me teach and finally, both of us visiting a third grade teacher teaching the deliberate math group. Prior to a more formal observation approach, I shared Hiebert's Five Dimensions and Core Features of classrooms that promote understanding in math (i.e. *Nature of Classroom Tasks*, *Role of the Teacher*, *Social Culture of the Classroom*, *Mathematical Tools as Learning Supports*, and *Equity and Accessibility*) so that she would be aware of specific evidence I was looking for when doing general observations.

In addition to using Hiebert's Five Dimensions, we also utilized Observation Protocols from the [National School Reform Faculty website](#). The Teaming Protocol was used for team teaching. Although it was difficult to take notes while team teaching, Alex and I decided to use it as a way to record which students we thought were struggling with the concept of dividing decimals. We quietly discussed what students were doing to make us come to that conclusion through use of Post-Its as we observed students solving problems while playing a game.

Alex was adept at identifying learners that were struggling with concepts and she also had ideas for intervention in order to address particular issues. An example of this was when a student could not identify where to place a decimal in a division problem. Alex decided she would provide additional warm-up or individual problems for those students the following week. In utilizing an "Exit Ticket," Alex was able to assess what her observations were of students that needed additional support with the concept with their own self-assessment. Students also gave a self assessment of what made their group work well together and what, if anything, made their group have a difficult time working together. In order to continue to support Alex's goal of incorporating technology, I also spoke with Alex regarding future use of technology such as Explain Everything or Show Me. These iPad apps allow students to articulate their thinking and understanding while demonstrating a set of skills. It also allows students to work in pairs in order to teach each other how to solve specific division problems. Furthermore, utilizing this type of technology allows the teacher the ability to assess individual student thinking by hearing their perceptions and/or misperceptions later on when the teacher reviews the recording.

Finally, Alex was continually open and flexible when it came to trying new things. She allowed me to use an iPad app called Sonic Pics when observing her class. This iPad app allowed me to take pictures of her class and then create a quick slideshow to record and give auditory feedback. Alex was also open to trying a blended learning approach by using Jo Boaler's online Stanford Math Course, called [*How to Learn Math for Students*](#). Alex modeled being a new learner for students by having a *growth mindset*, being resilient, being curious and by trying something new. She continues to share her excitement as well as areas she is nervous about with students. In doing so, she continually builds and renews trust with her students. She is positive, but firm. Her students know she has high expectations for them and believes whole-heartedly in each one of them. She loves her job and it is evident through her planning and execution of her lessons.

Future Goals:

As Alex and I work together throughout the remainder of the year, I would encourage her to continue to push herself in areas she feels she needs to continue to grow. Although technology is an important growth area for Alex, I will continue to remind her that it should only be used if it is the best tool for students to learn something new or practice a skill. I will also continue to remind her to choose cognitively demanding tasks that have differentiation built into the problem. We will work and learn together in creating those tasks ourselves as well.

I appreciate Alex's willingness in allowing me to mentor her. I look forward to continuing our learning journey together. It has been an honor to teach alongside her this year.