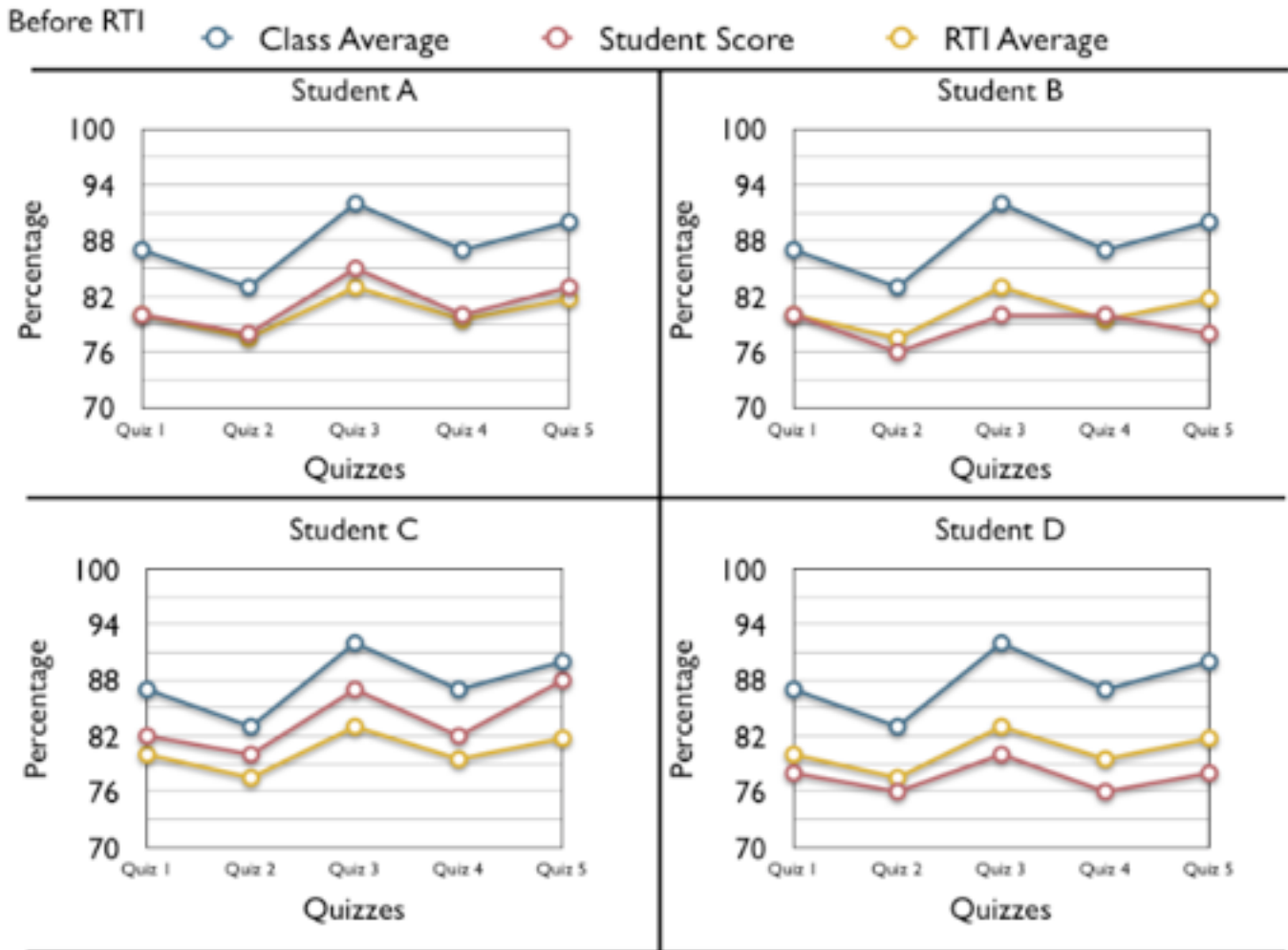


1. **Project title:** Multiple Math Methods
2. This project will focus on one 3rd grade classroom and it will involve delivering math lessons in a variety of ways, including through the use of websites and other teacher-created technology. The project team consists of myself, my friend and colleague Tessa Martin, 3rd grade teacher and her 3rd grade class.
3. **Needs assessment:** This project came into play from speaking with Ms. Martin about her students. The issue she is having in her class is that the lowest quartile of math students are falling behind in weekly quiz scores as well as chapter test scores. The school does not have a math intervention program, as so much attention is already paid to reading intervention. Together, Ms. Martin and I came up with an idea to attend to this lowest quartile without taking any instruction time away from the class as a whole.
4. **Goals and objectives:** The goal of this project is raise the testing scores and overall understanding of the students in the lowest quartile for math. We believe that the lowest quartile should meet or exceed the average quiz/test score of the class.
5. **Target audience:** Ms. Martin's 3rd Grade: lowest quartile for math (5 students). We believe that the rest of the class will benefit from this project as well.
6. **Technology:** We will use a smartboard/projector situation to implement the use of Keynotes/Powerpoints and lessons from www.Nutshellmath.com, as well as computer stations to view both. Nutshell Math is an online computer program that enables teachers and students to search for desired math topics aligned with their current textbook. Once a desired topic is found, users are able to access short tutorial videos and interactive quizzes. Students will see Nutshell Math being used during whole-group time on the projector as well as individually at computer station.
7. **Issues Thus Far:** Although Ms. Martin has been able to implement the given presentations and Nutshell Math lessons, it has proven difficult to squeeze everything in. It took a lot of planning and diligent time-keeping to stay on track. Another problem arose when a few students were absent for multiple days with illnesses. Two students were able to view the presentations and Nutshell Math lessons from home, but the third did not have adequate resources. Ms. Martin attempted to negotiate a time for the student to come early or stay after school, however it wasn't working out with the child's (or his parents') schedule. Since this student was one of the four in the lowest quartile, Ms. Martin had no choice but to pull him in during lunch recess and a few other specials, like art and music, to catch up. This is not something that I, or Ms. Martin was happy about doing, as missing enrichment time is not something we would normally have a student do. Further, lunch recess time is supposed to be part of each child's state mandated weekly physical fitness time, as the school does not have time or staff to offer P.E. everyday. The problems that have surfaced thus far are ones that we anticipated, but they are still tough to work with.
8. **Results:** This project yielded desirable results. We expected that the quiz/test scores would improve and overall, they did. According to these graphs, all four students that were targeted made some sort of improvement. Some improved greatly while others only improved by a small amount.
The first set of graphs show a series of 5 quizzes taken by the entire class before our

project was implemented. As you can see, the blue line indicates the class average, the red line shows the individual student score and the yellow line describes the small RTI group's average score. In some cases the student's score is above the RTI average and in some cases it is below. However, it is a common theme to see that the student and RTI averages are significantly lower than the class average.



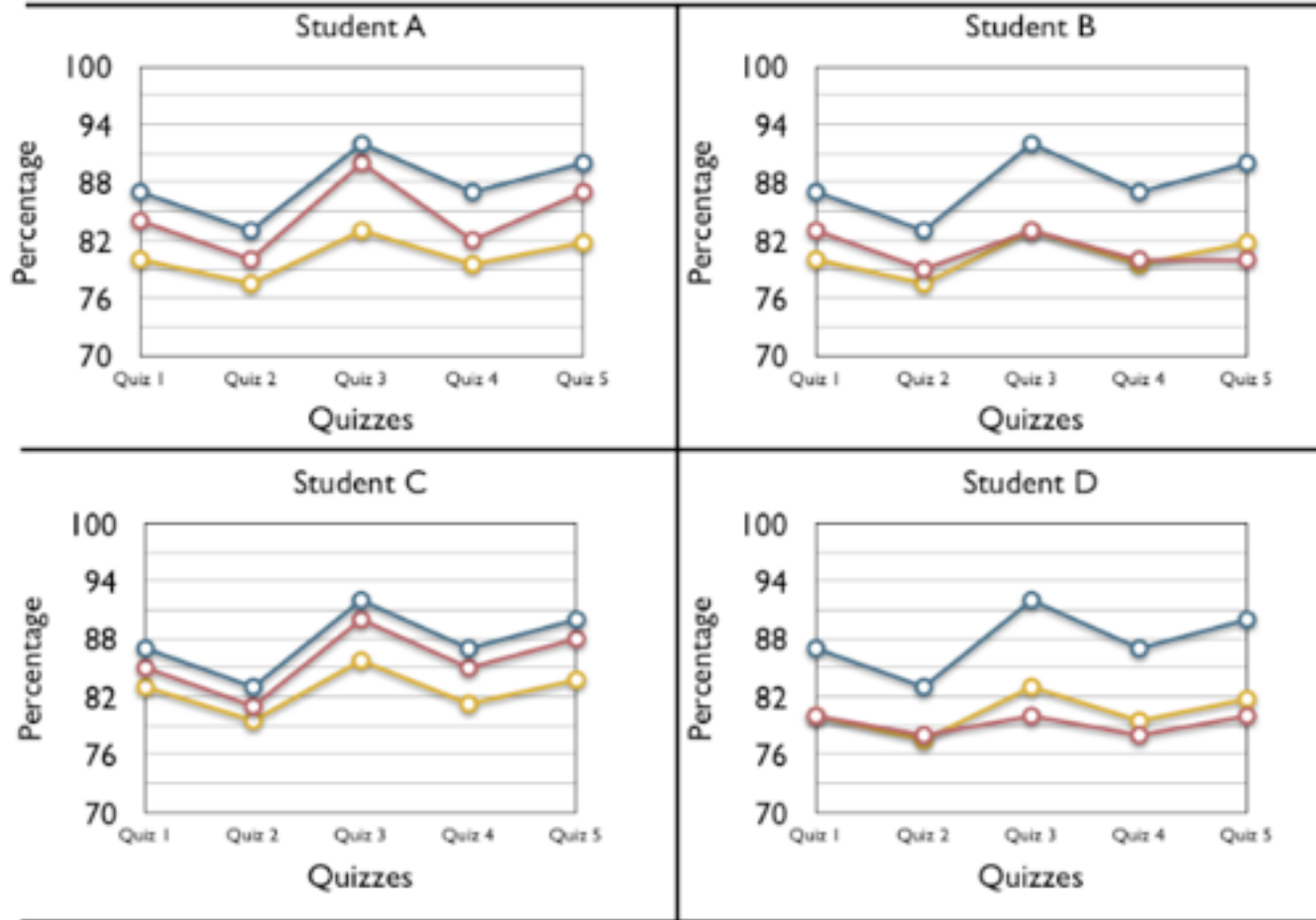
The next graph shows a series of 5 quizzes taken during the implementation of our project. The colors still represent the same values and as you can see there was an improvement in the student scores and obviously the RTI average went up because of that. While not all of the students made significant gains, we can tell from the scores whether our instruction worked for these students. As indicated in the issues section, we ran into an attendance problem with one student and therefore his scores did not improve as much as we would have liked. It is nice to see that the RTI group scores are getting closer to the class average. That is what we were going for and we think that if this kind of instruction continues that the scores will keep going up as well.

After RTI

○ Class Average

○ Student Score

○ RTI Average



9. **Reflection:** Looking back on this project, I am happy to say that I think it went well. It was difficult at first, logistically, because I am in NY and my collaborative partner is in FL. Luckily we both have great communication skills and we are very comfortable with each other. We have also taught together in many situations, so it was easy for me to create presentations that I knew she would be able to easily utilize. It was quite a challenge to create all of the presentations themselves, too. I am proficient in creating keynote presentations, so that was not a problem, but making sure the content aligned perfectly with what Ms. Martin was doing in class made me pay very close attention to detail. I think that using the NutshellMath lessons was easy to implement as we both have had experience using the program before. It also helped that Ms. Martin already had time set aside as part of her normal schedule for computer station time. I'm sure the students got tired of only using NutshellMath at computer station, but that's the way it goes when class time is limited! Doing this project taught me how to work collaboratively from great distance. I think that I was already quite good at working collaboratively when in close proximity, so I wasn't sure this distance thing would go. Ms. Martin and I are still great friends, so we must have done a good job working together. I was glad to be able to expose her students to these different modes of learning math. I believe that I was

helping Ms. Martin out, too, because I was doing most of the behind the scenes work, whereas she was the one who implemented the product. This method of collaboration suited us well. Not only did I help her out, but her lowest math students are improving, which means that they have a better chance of passing the state tests that are given in the spring. I am also happy with the fact that Ms. Martin's students now know how to log in to NutshellMath on their own and they can check it out at home if they do not understand something that was taught in math class. We were also sure to offer information about NutshellMath to the parents so that they could help their students with homework if needed. I can't tell you how many times parents write notes saying that they forgot how to do whatever their child was learning about so they couldn't help them with their homework. This excuse is almost obsolete now! Well, as long as the families have internet connections.

10. **Final Project:** The best way to show our final project is by sharing the presentations that were shown in class. Following is a link to the Keynotes used in Ms. Martin's class. [Collaborative Presentations](#). Because the website we used, www.nutshellmath.com requires a login and password, it is not beneficial to list the topics/lessons we used in our instruction. However, the textbook that we aligned our lessons with was Harcourt Math Series, as shown below.

