



**The Teacher Center of Broome County
Teacher Study Group Grant Award
2014**

**FINAL REPORT DUE BY APRIL 7, 2014
DOCUMENT PROCESSES AND OUTCOMES**

STUDY GROUP TOPIC: _2013-14 Common Core Study Group

List of group members: Crystal Reed, Ryan Hughes, Melissa Neely, Taylor Norton

The final report must be word-processed and submitted both in print and through e-mail using this form. Send print copy Teacher Center @ WSKG, BOCES Mail Drop #22 and e-mail file to btce@btboces.org. This report will be posted on the Teacher Center web page at <http://teachercenter.info>.

Describe the initial goal of the group noting any adjustments that had to be made as time passed.

Our goals initially were tri-fold. We were aiming to explore the new Math Common Core standards and the NYS modules and:

- Develop 21st century skill activities that would satisfy needs and requirements for teachers as well as students
- Develop a tool such as Moodle to enhance understanding of the Math curriculum among teachers, students, and parents while providing a forum for discussion and ongoing practice
- Develop a Math Problem Solving Model using existing framework that would help teachers, students, and parents alike when addressing word problems.

We really met all three goals. The 21st century skill activities are activities most teachers will be able to use when planning for 21st century skills during Math. Many of these activities can also be used for other curricular areas.

In addition, we developed a Math Problem Solving model based on an existing framework developed by our district before the Common Core standards were introduced. This new model uses the framework and includes both a methodical approach to problem solving as well as plenty of room for creativity and individuality. We tested this in a variety of classrooms from 2nd grade to fifth grade, and the students are meeting with success when approaching problem solving. Based on the results of each trial, we changed a few minor items as we

progressed.

Finally we investigated and set up several Moodle accounts with teachers, posted problems and opened forums of discussion. This was very successful in that students were engaged. They were using 21st century modes of communication and collaboration. And this forum allowed parents to become more involved. We have developed both a basic teacher and basic student guide to allow students, teachers, and parents a way to set up and use this program.

Moodle was perhaps the most time consuming component and also required the longest time to implement and test. We are still really in the early stages of knowing how successful and how integral this might become to our Math program. Students seem very engaged during school. However, we have not seen a large parent population involved as yet.

Overall, this study has been extremely helpful to teachers as well as students. We plan to continue to implement what we have started and hope that we get more parent involvement as time goes by. Even without that component, we as teachers are more comfortable teaching the Common Core modules using the new tools we have.

Describe the ACTION PLAN that the group followed.

Basically for each of the goals above we:

- Read

- Researched
- Discussed
- Implemented
- Changed things as needed based on research and trials
- Implemented
- Discussed/analyzed
- Finalized documents and strategies
- Wrote up final Moodle guides

Describe how the action plan was implemented.

We all read books that pertained to our area. Taylor read Moodle. Melissa read about 21st Century Skills, and Ryann and I read about Problem Solving Models. We researched, discussed, then implemented a Problem Solving Model. In doing so, we also developed a Problem Solving Organizer and an analysis sheet for teachers to gauge the success/difficulties students were having.

We tested this organizer and model out in various classrooms at the elementary level. Then we analyzed data, changed a few items based on our results, and tested the organizer and model again. We then analyzed second and third trial data and finalized documents and strategies.

Moodle was started by Taylor first, tested in his third grade classroom, and discussed. Based on initial success, I started Moodle in a second grade classroom, found interest and developed a letter to parents so that students can use Moodle at home as well as in school.

Evaluate the impact of the study group effort on teacher/student performance.

How has this study group changed you as a teacher? Do you anticipate that any of your teaching practices will have changed?

Our group has determined that this study group was very helpful for both teachers and student performance. As teachers we began this year with a directive to follow the Common Core as well as the Modules. We had no time to review the modules prior to the beginning of school, no time to plan the Scope and Sequence, and no firsthand knowledge of the structure of the content or the new strategies used. The study group at least helped us get a better grip on how to better teach math word problems in a way that students were able to grasp. Students are still struggling mightily with the new math word problems, however, we are finding that even in the initial stages of our new Problem Solving Organizer that students are able to understand what they are reading better and show their work in a way that facilitates that understanding.

The modules did not address much of the 21st century skills and communication that are required of students and teachers. Our newly developed list of strategies will make it easy for teachers to incorporate these skills along with whatever module they are currently teaching.

Our teaching practices have already changed. We are incorporating new techniques, new formats, and new strategies. We are developing a communication forum for teachers, students, and parents.

This study group has most certainly changed us as teachers. We have more useful materials at hand, understand better how to approach the new Math Module word problems, and have more potential communication tools at our disposal.

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What evidence do you expect to see of student achievement improving as a result of your participating in this study group?

Students are already showing that they can arrive at math problem solving answers more accurately and more successfully using our math problem solving organizer. It is our hope that this success in the classroom will translate to success during class tests and further

success at the NYS testing level. The techniques prompted on the organizer are techniques that will serve students well not just in school but in life situations and work ahead.

What evidence is there that the goals of the study group has/has not been met?

Math Problem Solving

1. As teachers involved in this study group, we have a better grasp on how to teach math problem solving so that students can find success. We are more confident and prepared in our teaching and have a model that students can follow.
2. We have evidence through the organizers that students are arriving with accurate answers during math problem solving when they use the strategies on the organizer. When they fail to follow the steps outlined, we can see that they may struggle to arrive at the correct answers.

21st Century Skills

1. As teachers we now have a list from which to pull activities and/or strategies so that we can incorporate 21st skills in our math problem solving. This adds to our knowledge and skill set.
2. Students will gain increased 21st century skills during math problem solving as

teachers implement activities on this list. This will help them succeed as students and as adults in work and life situations.

Moodle

1. Moodle accounts will allow for an open forum of teacher/student/parent learning. We are seeing students communicate with each other and with teachers using this forum. We have not seen parents use this tool as yet and will continue to work on that goal after this study group ends. It is our hope that parents will become part of this forum so that they can continue to be partners in their children's education.

Comment on the value of the study group process? Did it work for you?

This study group was an incredibly valuable resource to us this year. The paperwork was somewhat significant, but the opportunity to be funded while we tried to gain some control of a difficult curriculum year was one of the most valuable opportunities we were given this year.

Without this opportunity we believe we might still be struggling with how to find some student success with math problem solving.

We would likely have very few if any 21st century skill activities to easily draw from.

We would likely not have attempted Moodle.

Yes, this study group was extremely valuable.

Thank you for giving us the opportunity to not only further our professional resources and

expertise but also to improve the learning of students.

How can we make this study group program better?

This study group program has been a terrific opportunity for us.

The one area that we wish could be changed is how books and materials are ordered. Our books were all worthwhile to read but could have been even better if we had been able to order through Amazon where many more books were available at reduced cost and with often times more thorough descriptions.

This may not be able to change, so please know how grateful we are for the resources.

Again, thank you for your support of our profession and for giving us the opportunity to continually improve our practice!

A final report is due two weeks after the last meeting or by **April 7, 2014**, whichever date is first. The report must be typed and double-spaced using the provided form. One copy must be submitted in print and the file must be submitted through e-mail to [bctc@btboeces.org](mailto:bctc@btbooces.org). Return to the Teacher Center (Mail Drop #22), 601 Gates Rd., Vestal, NY