

Project Smart Team Action Report Form

Using Common Core Learning Standards & Data to Improve Student Achievement

Teacher(s)/School: Brad DePoint, Lura Sharp Elementary

SUNY Oswego faculty member: _____

Teacher Participant Names: Tom Trowbridge, Karen Herlowski, Brad DePoint

Project or Team Name: "STEM is Everywhere"

Please answer the following questions:

Analysis of Data on Teacher Learning:

We examined our reflections on the 6 shifts, and CCLS and found the following: (Support each claim with examples/evidence)

After collecting several student writing samples (Response, Opinion, and Narrative) and analyzing them on a rubric, based CCLS Standards 5.W.1, 5.W.2, 5.W.3, 5.W.4

After attending several NTI sessions in Albany this year I was able to better understand what the shifts and objectives were of the new CCLS standards. The six shifts have really been lumped into 3 main focal points now in mathematics which include Focus, Coherence, and Rigor. This is something that I have been very aware of in planning and utilizing the Lego kits and doing the STEM projects. This allows me to differentiate to each individual student need. As far as the shifts for ELA, the selection of text has not been the easiest task we have dealt with this year.

We have been aware of the balance of text, and supporting the "close reading" that accompanies it. The main focus of our project this year were shifts 4-6. Numerous writing based Lego projects were conducted where students used the iPads to plan their writing using an app called "Tools for Students". Another major part of the STEM focused projects was to increase the technical vocabulary that was used from math into the science based projects. These tier 3 words were often extremely difficult for students to retain and then use in multiple contexts.

Overall, the results were staggering based on the rubrics. Initially the students were scored on 4 point rubric including the following categories: Complete sentences with correct grammar, punctuation, and capitalization, clear coherent writing in which the organization was task appropriate (5.W.4), precise language appropriate to content specific vocabulary, and lastly the ability to quote specific text details in a given.

Balancing Informational & Literary Text Students read a true balance of informational and literary texts.

Shift 2	Knowledge in the Disciplines	Students build knowledge about the world (domains/ content areas) through TEXT rather than the teacher or activities
Shift 3	Staircase of Complexity	Students read the central, grade appropriate text around which instruction is centered. Teachers are patient, create more time and space and support in the curriculum for close reading.
Shift 4	Text-based Answers	Students engage in rich and rigorous evidence based conversations about text.

Shift 5	Writing from Sources	Writing emphasizes use of evidence from sources to inform or make an argument.
Shift 6	Academic Vocabulary	Students constantly build the transferable vocabulary they need to access grade level complex texts. This can be done effectively by spiraling like content in increasingly complex texts.

Analysis of Data on Student Learning: We examined _____ pre and post assessments _____ and found ___ several interesting data discrepancies _____.
(Give examples/evidence for each claim).

Ideally we want to get students to be diverse learners who are able to transfer knowledge from multiple areas of study, and interweave them together to create a richer deeper understanding. With this said, students can use their foundational skills of math and reading to apply it to scientific methods of study. By using STEM projects from major science strands taught at fifth grade, we were able to incorporate multiple projects into our regular reading blocks and math blocks by integrating a “project based” learning model. Something that we found based on the assessments was the ability to use technical vocabulary increased by 25%. The ability to organize information in “project form” increased by 45% after several lessons on the engineering model concepts. The ability to organize information in “written form,” specifically in multiple paragraphs, increased by 65%. This was partly due to the fact that students used graphic organizers on the iPad to plan, then apply their thoughts in a logical sequence. Overall, I know that the data was partially skewed due to how much we taught them throughout the units of study. It is obvious that the numbers speak for themselves.

Some other data we collected is the increase of 21% in ORF on DIBELS. This could be contributed to the multiple close reads we did on technical text related to the topics of study.

One objective that I set for myself this year was to get more of the building involved in utilizing the materials I was purchasing. Essentially building a resource for teachers to use at multiple grade levels. This did not have as much interest as I had originally hoped, but upwards of 50 students other than the ones in my class benefited. The collaboration between 4th and 5th grade students was nice to see. I hope that next year brings a greater interest in using the Lego kits available.

My favorite part about the entire school year is the following testimonials of learning from the kids...

“My favorite thing I did in fifth grade was the “Lego Project.” This project taught me how to be active and creative and use metacognition to what I learned in the UDHR (Universal Declaration Human Rights). In the Lego project we had to depict how someone had their rights violated, but the hard part was trying to write a story on how they overcame their obstacles. Overall, this was the most fun year I have ever had. A lot of this is thanks to Entergy for the materials and Mr. DePoint who let us use all of this cool stuff.

M.M.

This year was awesome! I loved all of the projects that we did with Mr. DePoint. My favorite project was making the buildings out of spaghetti, marshmallows, and string. Then we got to test them on the shake table. I learned a lot about how buildings have to be sturdy and resist the effects of the plates moving. Even though we don’t have too many earthquakes where we live, I might move to California someday.

I.M.

2012-2013 Reflection

Brad DePoint

SUNY Oswego/Project SMART/Entergy

Again, this year Entergy provided me with the opportunity to do some amazing things with children. Every year when I have the opportunity to reflect upon the successes that I witness in student learning, I am truly amazed. This year because of the push for STEM and project-based learning aligned with the new CCLS, I decided to integrate a lot of themed lessons into my instruction.

The initial project that we started with was an all-encompassing lesson about how to construct a table from 10 sheets of newspaper and 1 foot of tape to support the weight of a math book. This project required research, reading, planning, and a thorough understanding of the engineering model. Technology was at core of this lesson, using QR codes to guide students to certain readings relevant to the task. Even though only 2 teams were successful with the task of holding the math book, the reflection and learning that came from failing was essential to their learning and understanding. This helped pave the way for future projects using the engineering model.

If I listed all of the projects and gave specific details about each one, I would be writing for days. The project I was most proud of was the LEGO project connected to the novel Bud, Not Buddy. This project sparked the interest in several other teachers in the building to use the LEGO kits in their instruction as well. The creativity and collaboration among the students in this project was amazing. Because of the increased rigor within the CCLS students were expected to quote, connect, and synthesize multiple texts and communicate their understanding both written and orally. The most amazing thing was that my students with IEP's could participate in the same conversation at the necessary depth as everyone else. This was due to the self-created scene that resonated with what they had read and connected to. Too often in education we think that students can't do things and we rule out that they might rise up to our challenge. This is why I love my job! I love seeing students surprise themselves and see the successes that they discover.

I hope that in the future I will have the opportunity to participate in this wonderful experience.