BYRAM HILLS CENTRAL SCHOOL DISTRICT ARMONK. NEW YORK

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Title of Project: Integrating Google in the Classroom to Enhance Student Collaboration

Year: 2013-14

School/Grade: Wampus Elementary, Grades 3-5

SUMMARY OF INVESTIGATORS OF PRACTICE ACTION RESEARCH PROJECT

Context:

I am an Advanced Learner teacher of students in Grades 3-5. My Enrichment classes are typically made up of 6-9 students, and we meet weekly for 40 minute sessions. My classes are comprised of students who display strengths in the areas of creativity, originality of thought, independence, and academic perseverance.

I have been interested in developing an effective way for peers in the advanced learner program to share ideas, interact, and grow together intellectually throughout the year. These students are not ordinarily placed together in homerooms, and the concept of providing a network to collaborate and interact was the impetus for this project.

Action Plan:

I chose to research the following question: How can I enhance interaction and collaboration with students at home and in school through the use of Google? This was a natural choice this year given our district's commitment to providing availability and training on Google products and apps.

Through my research, I further understood that utilizing this method of a common space for communicating and sharing ideas would allow for the following to occur:

- change in student and teacher roles, placing students in an active role, rather than the passive recipient of knowledge
- change in teacher role, becoming more of a facilitator and manager of project guidelines, resources and provider of feedback
- increase in motivation and enthusiasm for work
- greater acquisition of technical skills
- greater collaboration with peers
- increased use of outside resources
- improved attention to audience

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Throughout the year, I collected weekly anecdotal data through student observation of online and classroom participation. I also checked in with each class weekly ensure that the Google environment was accessible and effective as they worked at home.

Results:

As I reflect on the year, I made the following observations:

- Students showed an increase in the number and quality of comments posted to each other's work, and the ability of students to comfortably receive feedback from peers.
- I was able to provide instant and continuous feedback throughout the week to my students.
- I observed students gaining a deeper understanding of the material we studied through the work/comments of others.
- Although most our students were not familiar with Google as the year began, the increase
 in their technical ability was evident and exciting as we taught each other and learned
 together how to navigate and collaborate effectively.
- Students had an increased connection to work throughout the week. I noticed students
 coming back to their work multiple times to check in, make comments, and tweak their
 assignments.

Sample of lesson with 5th Grade Students - CHILDHOOD Unit of Study:

Directions: In class, we began reading "Romel's Rainforest Home." Please click on the link below to finish reading the story. :/http/www.rainforest-alliance.org/kids/stories

When you are finished, please answer the following question. Remember to add your name in the first column, and feel free to comment on any other student's contributions, as well!

If you choose to comment on another student's entry, please make yours another color, and add your name.

1. What surprised you the most about Romel's story, and why?

Student A	I'm surprised that Romel never had a store in his town since a few years ago! I can't imagine what it is like in town with no storesStudent A
	I wonder what Romel ate at school? Did his school even give lunch to buy before
	the store? What did he bring from home to eat-L.
	I agree with you I can't imagine not having a store in your town, I love going to our town and going to places like Broadway pizzaS.
	I think he brings lunch from homeM.
	I also cannot believe that he didn't have a store in his town since a few years ago. I wonder if he made all his clothes and possessions before the store opened up-A.
	I can't imagine growing our own food if we didn't have stores. I think I would starve because growing your own crops takes a while. – S.
	I can't imagine not buying my food from a store; Romel had to climb a tree just to get seeds from pods!-E.
	Me too I wonder how they get that much food besides growing plants in their

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	little farm –J. I think it might be good there because that's what they are used to eatingS. I'm surprised by that to because if they don't grow all different types of food and hunting the same food they will just eat meat and what they grow-J. I agree it is probably pretty weird not having stores. –E.
Student B	I wonder how it is to walk an hour to school and back home! Walking 2 hours a day! I wonder if maybe you can take a boat to school. –Student B. I agree that would be tiring to walk to and from school if was an hour away. – J. I am starting to wonder how kids like us don't get tired after walking for an hour to school How can they still have energy to work?! – S. Wouldn't Romel be tired to do this every day?- R. But Romel said he lives close to school and the other kids walk an hour to get there, but still I can't imagine walking for an hour to get to school. Wouldn't they be tired? How would they do good in school? Maybe if they made another school closer to those kids houses it would be betterS/
Student C	I wonder if Romel liked doing chores around his house and won't he get bored. I wonder what would it feel like taking down pods with a stick or climbing up the tree to get that one last pod. – Student C I wonder that too. Maybe he likes helping with the farm-A. Maybe he only likes to help with the farm sometimes. I can't imagine working on a farm directly after school. It must be very tiringE. I agree he must get bored of it sometimes but i bet it is also very exciting when you see a animal. – E.S. I wonder how heavy the bamboo stick is that he has to carry to knock down the pods. Romel must be a good climber to climb the trees for podsL.
Student D	I'm surprised that Romel has so many chores to do at his age! I agree that the chores are probably fun because you can learn and experience so many amazing things. I also feel bad for him because Romel is only 13 and he has to do chores before breakfast! –Student D. Romel does have a lot of chores. That is really cool. – J. Some chores help you learn but they can be hard even before breakfast!-P. I agree I think it could be fun to go in a rainforest harvest cocoa beans depending on what kind of things you enjoy I know personally I would have lots of trouble getting the beans and I'd be scared to go travel into the rainforest-S. I know right it must be kind of annoying. Especially waking up so earlyC. I agree that Romel's chores can be fun, but doing them too much may get tiringB.

Implications:

The participation and attention to my action research this year has truly changed my approach as an educator. I have modified the way I conduct lessons, keep records, and communicate with both my students and their parents. I am able to get to know and understand my students at a much deeper level, and provide more meaningful feedback. This, in turn, seems to have trickled down to them and their ability to communicate meaningful feedback to peers. I cannot imagine teaching without the use of Google in the future.

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The implications for this research project are far-reaching. I envision this kind of environment for all classrooms as we move forward each year. The students demonstrated that they are capable, motivated and successful as they learn new technology. Other significant conclusions I have made include the following:

- Parents are more involved and can also monitor student work.
- Resources are always readily available, both at home and school.
- The home-classroom connection is strengthened for students and demystified for parents.
- The ability to provide students a wide range of articles, videos, skill-building activities, and feedback is increased, thereby allowing students to work at their own speed and ability level.

Some new questions I am considering include:

- How can I connect with and include teachers in other buildings/districts to bring together more student interaction across the region?
- How can I incorporate Google Hangouts to include live interactions with specialists (i.e. scientists, elected officials, artists, etc.) in the field we are studying?
- How can I utilize the power of Google Forms to help students collaboratively engage in authentic data collection and reporting?

Resources:

"Technology and Education Reform"

A Research Project Sponsored by the Office of Educational Research and Improvement U.S. Department of Education (Conducted by SRI International) http://www2.ed.gov/pubs/EdReformStudies/EdTech/effectsstudents.html

"12 Effective Ways To Use Google Drive In Education." Jeff Dunn. http://www.edudemic.com/12-effective-ways-use-google-drive-education/

Educational Leadership: "Where's Waldo? Finding a PD Partner"

Kathryn Roots Lewis and David V. Loertscher

http://www.ascd.org/publications/educational-leadership/may14/vol71/num08/Where's-Waldo

%C2%A2-Finding-a-PD-Partner.aspx

Education Week: "Four Steps for Jumpstarting Global-Collaboration Projects," Ben Curran http://www.edweek.org/tm/articles/2014/04/15/ctq-curran-global-collaboration.html?qs=using+google+in+classrooms