

Inquiry Based Project

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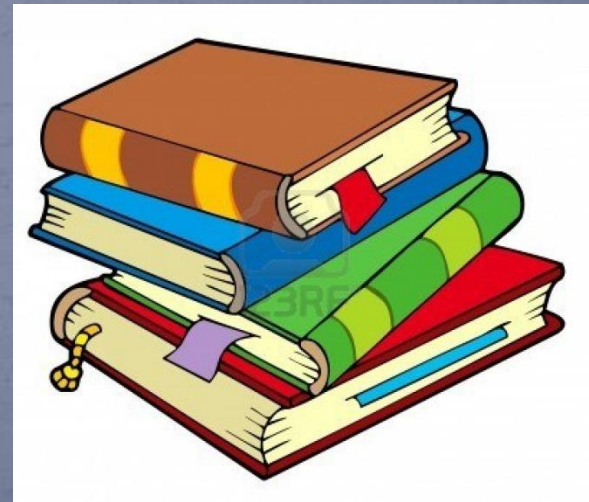
Welty Middle School

1:1 Technology Integration



7 Essential Components

1. Conduct a needs assessment
2. Collect Data
3. Propose Research-Based Solutions
4. Evaluate each solution
5. Create an Action Plan
6. Reflection
7. School Leadership Team



Needs Assessment

- I met with the principal at Welty Middle School in New Philadelphia, OH to discuss issues and concerns for the building.
- The principals name is Carl Mccrory and this is his second year at Welty, but he has held a variety of other positions with other districts from teacher to superintendent.



Needs Assessment

- Mr. Mccrory and I discussed issues around the building and the one we kept coming back to was the implementation of 1:1 and whether it had the desired outcome of improving test scores and improving the student experience.

Strengths of School/Community

- Supportive community who likes to see our school do well in academics, sports, music and art.
- Support parent groups and families
- Great support from local business to help out staff or students in need or to speak to the school

Challenges Facing School/Community

- High unemployment and poverty rate in our community
- Located at the foothills of Appalachia
- More than 60% of our students qualify for free and reduced lunch
- Access to technology at school is some students only experience with technology or internet

Building Information

- Welty Middle School is a grade 6-8 building in New Philadelphia City School District
- Made up of 704 students in the 2016-2017 school year.
- Received the Momentum Award in 2016 for growth



**OHIO STATE BOARD OF EDUCATION AWARDS
NEW PHILADELPHIA CITY SCHOOLS
2016 MOMENTUM AWARD**

Challenge Statement

- New Philadelphia City Schools will work to improve the student experience in our new 1:1 initiative in grades 6 and 7 and work to improve test scores on MAP tests through the implementation.

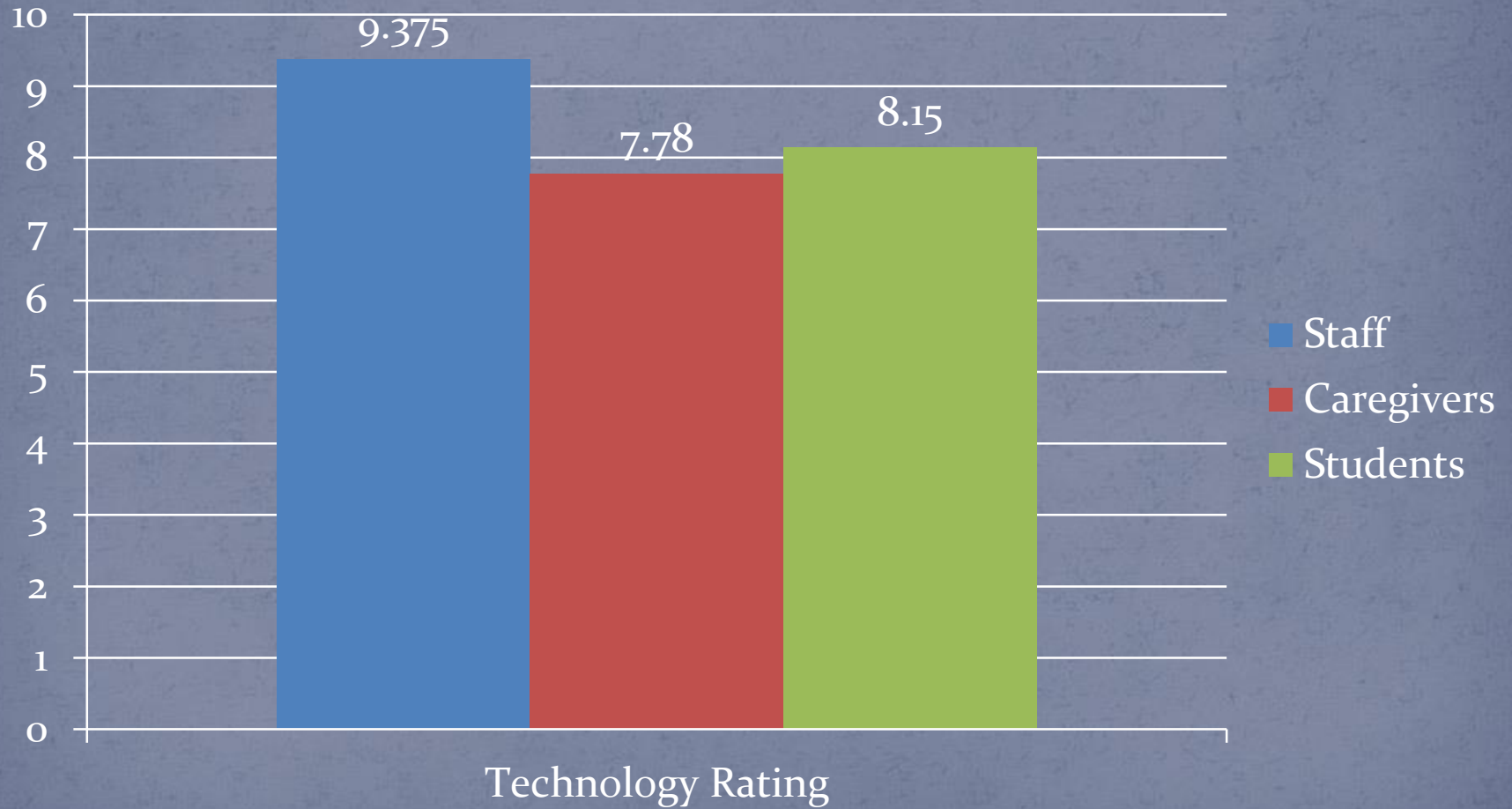
Data Collection

- I distributed a Technology Survey to staff, caretakers, and students.
- The surveys completed by staff in a PLC meeting and returned to me later in the day.
- The student surveys were voluntarily completed during English Language Arts classes in each block of the 6th grade.
- The caretakers surveys were sent home with a cover letter and given a week to fill out and return to the school. This was also voluntary.

Data

- On the next slide is a graph using a 1-10 rating staff, students and caregivers were asked to rate the implementation of 1:1 technology this school year in grade 6.
- Results were very positive with the implementation

Rate the use of 1:1 in 2016-17



Survey Data

- The following slides were items that staff, students, and caregivers responded with on my survey. They highlight areas of strengths and weaknesses that they feel need addressed for next year.
- Staff was limited to teachers in the 6th grade from this school year and last.
- Students are the children who are in the 6th grade this year and part of the first group to use 1:1
- Caregivers were made up of parents, guardians, grandparents as indicated on their survey responses. No other responses were indicated on surveys.

Staff Survey Results

- Average rating: 9.375
- Implementation:
- Students like to use Chromebook in the classroom on a daily basis.
- Send Chromebooks home first week of school
- Students feel engaged
- Strict consequences for visiting inappropriate sites or misuse of Chromebooks
- LA and Math MAP scores are increasing
- More Professional development for use and implementation of 1:1
- Software to protect students at home
- Chromebooks better prepare our students for mandated state tests like AIR
- Guidelines for misuse and consequences for misuse

Caregiver Survey Results

- Average Rating: 7.78
- Implementation:
- Grades improved
- Easier to work outside school
- Teaches student responsibility
- Better prepared for online testing
- Block scheduling is great
- Can not replace a good quality teacher
- Work on things at their own pace
- More engaged in schoolwork
- Better learning experience
- Accelerates learning with the blended model

Caregiver Survey Results Continued

- Limits books brought home
- Improved learning experience
- Students are more engaged
- Parents would like training on programs used and Chromebook integration
- Needs better tech support
- Initial roll out was slow, bring home Chromebook sooner
- Block Games
- Better teacher/parent communication
- Explain to parents what 1:1 is and how it will be used

Caregiver Survey Results Continued

- Students are off task in class
- Block inappropriate websites
- Poor quality Chromebooks
- Parents would like to see student work
- Add printer access for parents at home
- Make a mouse available
- Internet access is limited at home, make items available offline
- Students often just Google answers to questions
- Better cases
- Many students use this for things other than school work
- Parents have heard children complaining they are a distraction in class
- Math Curriculum is hard
- Use the Chromebook for everything

Student Survey Results

- Average Score: 8.15
- Implementation:
- Math Scores have increased
- Helps students with organization
- Focus on online testing
- Read aloud helps students who struggle with reading
- Less paper resources
- Get help when needed on internet
- Work at own pace
- Gives opportunity for extra practice
- More resources
- More engaged
- Long battery life
- Faster

Student Survey Results Continued

- Really enjoy using them
- Take Chromebooks home sooner
- Many students are off task, even when testing
- Internet is slow
- Would like to have a mouse to use
- Block gaming APPs and websites
- Bigger screens
- More rules/punishment for offenders

MAP Data for 2016 vs 2017

- The following slides will look at the scores from student MAP Data for 2015-2016 versus 2016-2017.
- Data is included for ELA and Math since students take that test every year in grade 6.

Math MAP Data 2015-16 vs 2016-17

Year	# of Students	Students who met growth	Percent of student who met growth	Growth Rate
2015-2016	210	137	65%	10.3
2016-2017	214	129	60%	8.7

- A similar number of student took the MAP assessment over the last two years
- According to this data our scores have seen a decrease of 5% on those who met their growth rate
- The growth rate also decreased 1.6
- Students had a similar RIT score as well. In 2015-2016 it was 224.2 and in 2016-2017 students had 217.2 meaning that students in 2016 had more room for growth

ELA MAP Data 2015-16 vs 2016-17

Year	# of Students	Students who met growth	Percent of student who met growth	Growth Rate
2015-2016	214	147	69%	9.1
2016-2017	212	140	66%	8.4

- A similar number of student took the MAP assessment over the last two years
- According to this data our scores have seen an decrease of 3% met growth rate
- The growth rate however decreased 0.7.
- Students had a similar RIT score as well. In 2015 it was 215.8 and in 2016 students had 213.0 meaning that students in 2016 had more room for growth

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Changes between 2015-16 and 2016-17

- Implementation of 1:1 technology using Google Chromebooks
- Switch to block schedule
- Classes are 85 minutes in 2016-17 instead of 42 minutes in previous years
- Students in 2016 spend 85 minutes per day in Math, ELA, 42 minutes in Social Studies and 42 minutes in Science.
- One of the 3 houses is a gifted track where the 6th grades students who have been identified as gifted are placed. This is also new for 2016.

MAP Data Conclusion

- Results from MAP data are very similar for the percent meeting growth but overall growth was not as strong in year one of 1:1 and block scheduling

Research-Based Solutions

- According to Gorton (2007), “In attempting to orient the faculty to the proposed innovation, the administrator needs to be aware of the typical concerns teachers have about the innovations” (p. 185).

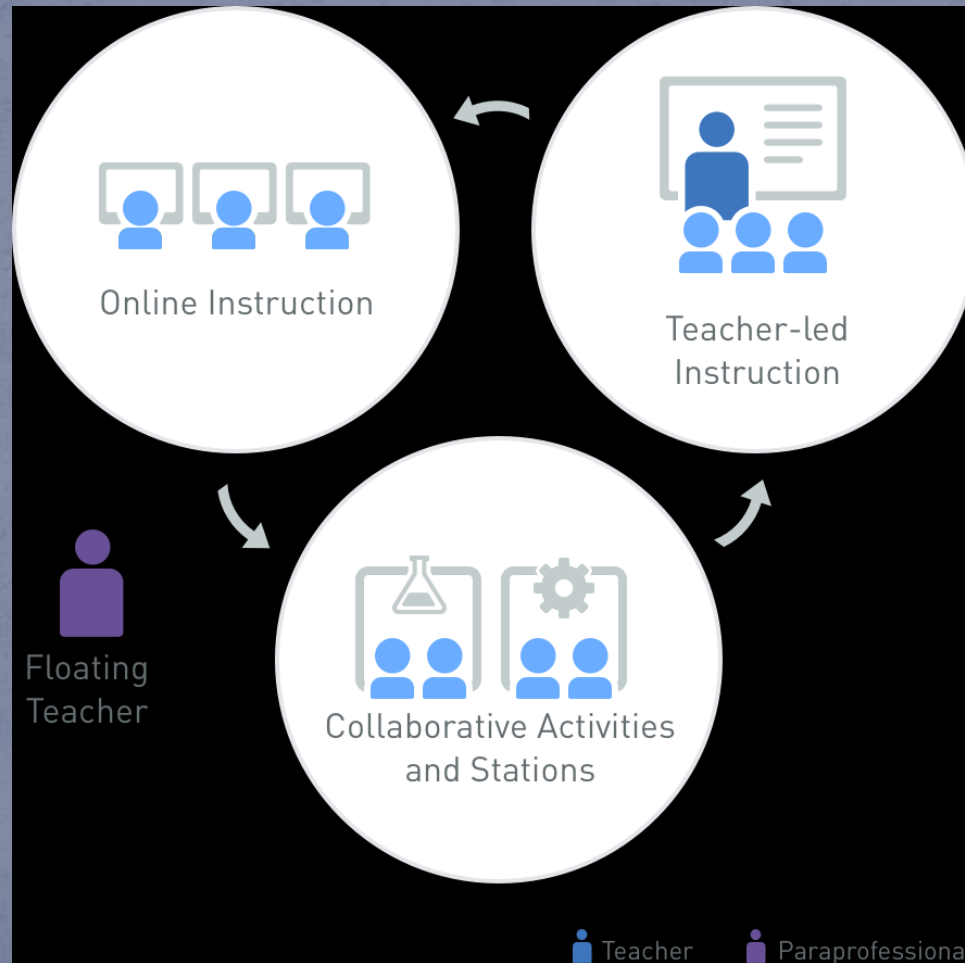
Research-Based Solution Student Experience

- Blended Learning Approach
- <http://www.blendedlearning.org/models/>

We will look at the following Blended Learning Models

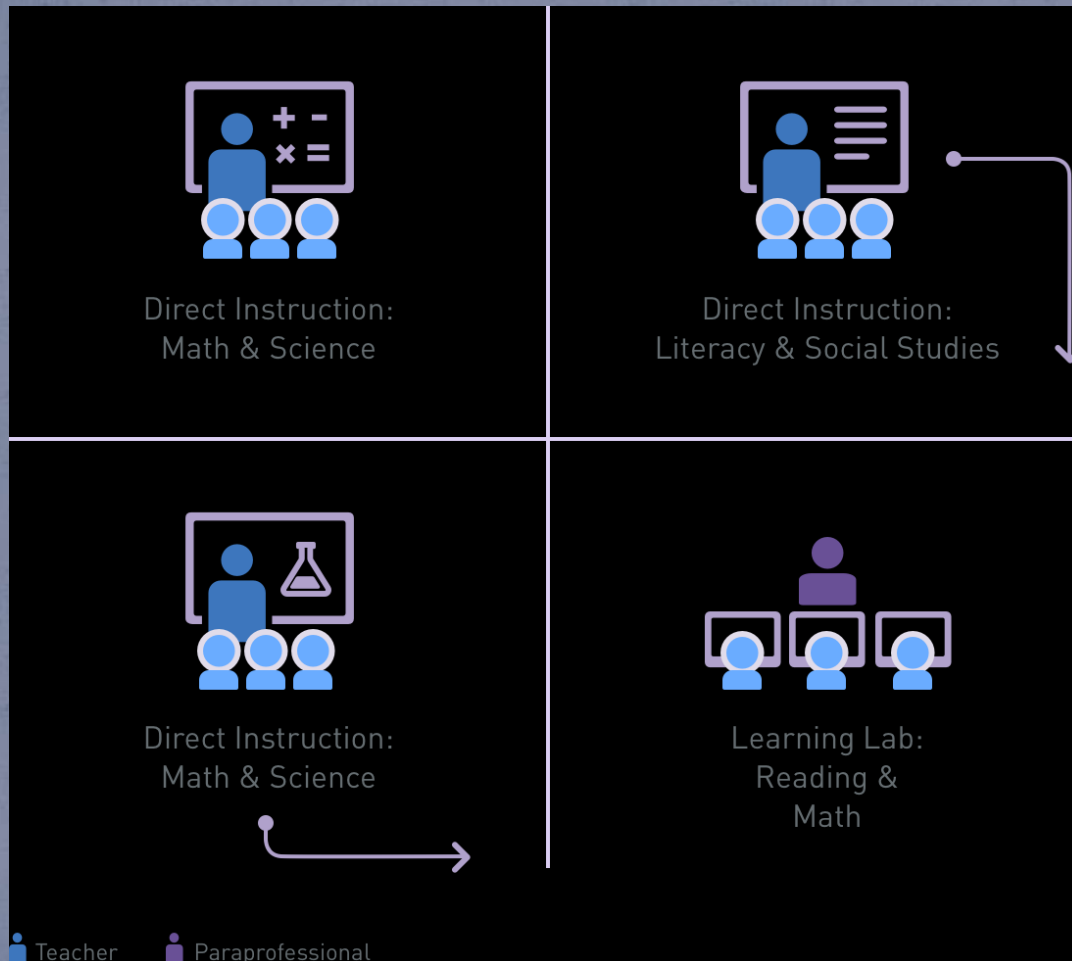
- Station Rotation
- Lab Rotation
- Individual Rotation

Blended Learning Station Rotation



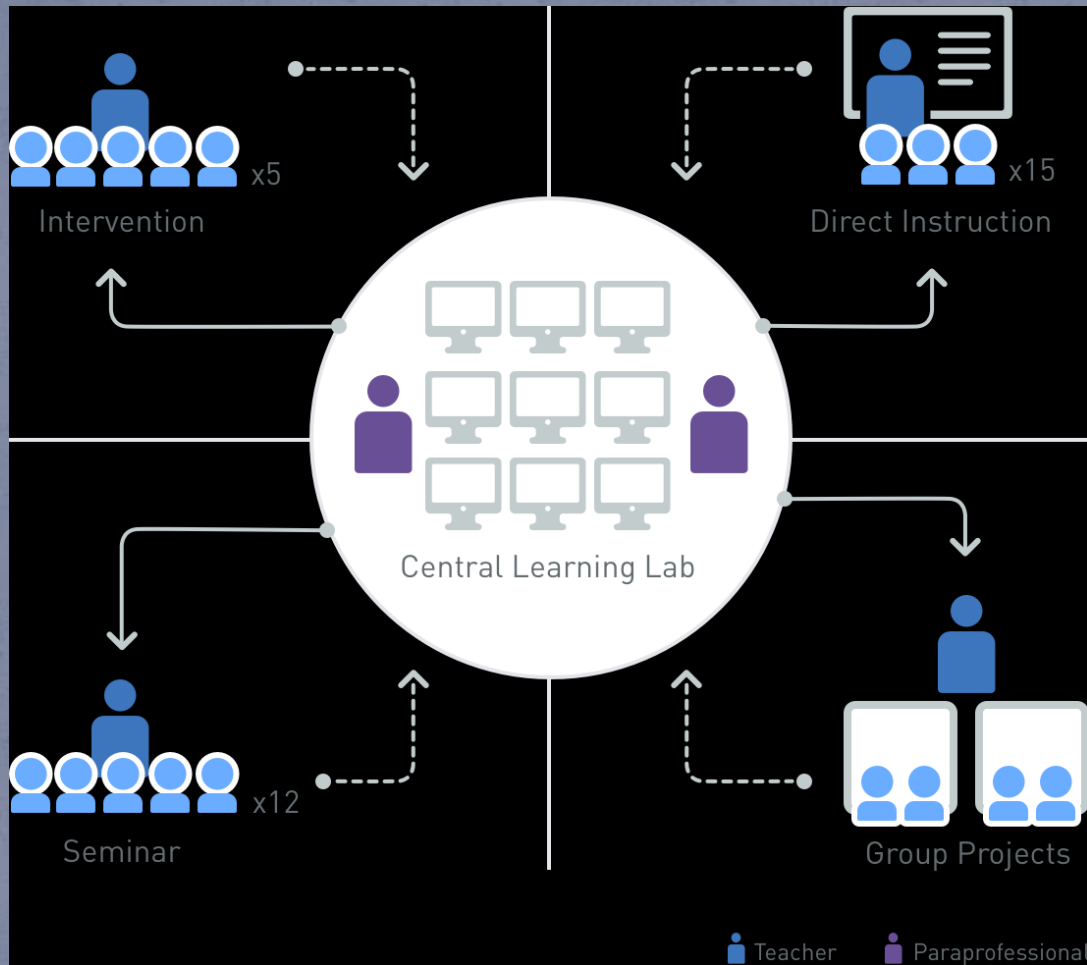
[Video Link](#)

Lab Rotation



[Video Link](#)

Individual Rotation



[Video Link](#)

Researched-Based Strategy

- How do we improve our student growth?
- We will be looking at strategies by John Hattie to improve student growth that we will be using in each of your classrooms next year.
- According to Hattie's research the following are the 10 best ways improve students achievement in the classroom.
- For year one we will only be focusing on Student Self-Reported Grades

Researched-Based Solutions

Hattie's Strategies to improve Student Achievement

- Student Self-Reported Grades
- Piagetian programs
- Response to intervention
- Teacher credibility
- Providing formative evaluation
- Micro-teaching
- Classroom discussion
- Comprehensive interventions for learning disabled students
- Teacher clarity
- Feedback

Student Self-Reported Grades

- Have students set expectations for performance
- You can use this for student test or exam grades
- MAP or AIR Testing Data
- Come up with a number and record it somewhere the students can reference when it comes time to take the test or complete the assignment
- Be specific
- Teachers make a chart to see if students met their goal
- If so school will provide a reward

Research-Based Solutions

- Project Based Learning
- According to Arends (1997), “Problem-based instruction was developed primarily to help students develop their thinking, problem-solving, and intellectual skills; learn adult roles by experiencing them through real or simulated situations; and become independent, autonomous learners” (p. 158).
- Activity Based Learning
- <http://www.teachthought.com/learning/project-based-learning/a-better-list-of-ideas-for-project-based-learning/>

Evaluate Each Solution

Strategy	Decision
Station Rotation	This seems to be the best strategy to use in year 1 so we will have training and professional development on it
Lab Rotation	This does not fit with our current setup
Individual Rotation	May try in the future but not in year 1
Student Self-Reported Grades	According to research this strategy helped student increase their score the most so we chose to use it next year
Rest of Hattie's strategies	Will try in the future but not in year 1
Project Based Learning	Can use in each class but will not be a required strategy
Activity Based Learning	Can use in each class but will not be a required strategy

Action Plan

- Our Action Plan is designed to help teachers, caregivers, and students get better acclimated with the 1:1 technology in future years.
- Since we will be implementing the program in grade 7 next school year and then hopefully in grade 8 the following year this is at least a 2 year process.
- We will also focus on how to improve student scores and experience
- Teachers will focus on more professional development to continue to improve our program.

Action Plan for Staff

- Hold teacher training on 3 flexible and voluntary dates throughout the summertime to get 7th grade and new 6th grade teachers ready to use the 1:1 in their classroom.
- Trainings will be held on the Canvas program, how to use the technology in the classroom, and safety.
- We have a district Technology Coordinator that will be leading Professional Development on Teacher In-service Days for our 6th and 7th Grade staff
- According to Uy (2017), “Professional development plays an important role and pillar to the successful launch of 1:1 device initiatives” (p. 27).

Action Plan for Staff

- Professional Development on Hattie's Strategies will take place on Teacher workdays before school starts in 2017
- We will also hold Professional Development on using Station Rotation during year one.

Action Plan

- Hold an open house for 6th grade students and new 7th grade students to learn about our 1:1 program and how to use it.
- Have a caregiver night on August 22, 2016 before school starts to offer caregiver training on how to help their child succeed on the Chromebook
- We will also hold caregiver nights on Parent Teacher Conference nights where families or friends can come in for help or questions about the use of Chromebooks

Action Plan

- Send Chromebooks home before first midterm in 2017-18 school year.
- Using Hattie's Strategies have students record a goal and post them in classroom
- We are going to create a Weebly with easy directions, problem solving tips, and contact information.
- The Weebly will also have homework help and tips for completing assignments.
- According to Uy (2017), Parents in a study with use of 1:1 devices increased the amount of time they spent working with their students on their homework assignments and the use of computers to conduct research" (p. 34-5).

Action Plan

- Install safety controls on each Google Chromebook
- According to Uy (2017), “Many teachers around the nation may not have all the necessary controls to monitor how students are using the devices in the classroom” (p. 123).
- Purchase a mouse for each Chromebook. \$7 per unit and 300 units needed.

Action Plan for Community

According to Weinstein (2007), “Parents are not the only ones who wonder how they can help with their teenagers’ homework assignments.” (p.135).



WELTY CURRICULUM NIGHT

Join us to hear some of the exciting items for the 2017-2018 school year.

Wednesday, May 10, 2017 - WMS Auditorium

The times are as follows:

- Next Year's 6th Grade 5:30
- Next Year's 7th Grade 6:30
- Next Year's 8th Grade 7:30

We will be covering:

- Middle School Teaming
- Course Options for Each Grade
- Course Selection Forms

If you are unable to attend, please don't worry.

We will be visiting all classrooms to send home registration papers on May 12.

Next Fall

We will have our Back to School Orientation in August to discuss:

- Lockers
- Classroom Locations
- Schedules
- General Middle Procedures
- 1 to 1 Technology



References

Arends, R. I. (1997). *Classroom instruction and management*. Boston, Mass.: McGraw-Hill.

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Staff, T. (2015, November 05). A Better List Of Ideas For Project-Based Learning. Retrieved May 04, 2017, from <http://www.teachthought.com/learning/project-based-learning/a-better-list-of-ideas-for-project-based-learning/>

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Waack, S. (2017). Glossary of Hattie's influences on student achievement. Retrieved May 1, 2017, from <https://visible-learning.org/glossary/>

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Reflection

Throughout this entire project it was very interesting to me to see how many people need to be involved to make sure this is going to be successful. I have had a great opportunity to work with many great people on this project. I know that we will continue to modify and change things as we move forward. The staff was very open to sharing their opinions with me about possible changes they thought needed made. We had a great discussion after I presented the data to them about ways we could improve moving forward.