Elementary Math & Technology
Creating Interactive Elementary Classrooms

**The Challenge:**

It is teachers with access to technology that will make the difference. This work is entirely achievable, but it will require cultural change and will be difficult at times. It will require us to focus on a small number of ambitious goals and make the integration of technology the daily agenda.

***Goals for our Program:***

1. **Support students in obtaining the Common Core Mathematics Standards through technology based instruction.**
*According to the U.S. Department of Education and recent studies by the National Training and Simulation Association, technology based instruction can reduce the time students take to reach a learning objective by 30 to 80 percent.*
2. **Utilize the Go Math materials upgrade to design a blended learning environment that provides teachers with better tools, more time and informative data.**
*Too often technology and digital learning is added on top of the existing practices, challenging already busy curriculums and overwhelming busy teachers. Instead, successful digital learning implementations require modifications to the curriculum to replace ineffective practices with those that best leverage the technology.*
3. **Provide students with personalized instruction, practice and formative feedback that support a competency based system.**
*Today’s students are “digital natives” – they are growing up in a decidedly digital world. Digital learning educates students using the same technology they use for communication and entertainment outside of school – smartphones, tablets, and laptops. It is not that students are only engaged by technology, but instead the passive, one-size-fits all education practices are not adequately adaptable to each student’s needs and aptitude.*

***Vision across the grades:***Developing a blended learning model in our elementary classrooms will provide teachers the tools and skills necessary to guide our students towards obtaining the knowledge, skills, and abilities they will need in future years.

*Blended learning involves an instructional shift in some portion of the day to an online environment. This shift is intended to make learning more productive by giving teachers* ***better tools, more time, and informative data.***

Providing teachers with better tools and professional development will increase their ability to deliver the appropriate instruction the student needs in a setting and manner the student is most comfortable with. These better tools will provide teachers with more time to meet individual needs of students and specifically design instruction to meet those needs.

The informative data that will be collected from these better tools will provide our teachers with real-time data to enhance the students' learning opportunities. Via this implementation, and the ensuing progressive steps committed to by our district, exiting students will possess the knowledge, skills, and ability for future success in the next stage of their life.

**Defining and Monitoring our Implementation**

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| District Critical Success Factor | Initial Metric for Analysis |
| 1. Ensure successful delivery and set-up of equipment prior to the start of implementation.
 | Distribution and start-up of hardware in all classrooms. |
| 1. Provide initial and ongoing district professional development to all classroom teachers on the expectations and implementation.
 | Percent of teachers trained on expectations & teacher survey focused on additional supports needed. |
| 1. Provide school leadership with professional development, on-site support and monitoring tools to support teacher implementation.
 | Hours of leadership professional development and onsite support per building |
| 1. Provide schools and teachers with differentiated professional development that supports both the management and maintenance of equipment and the implementation of our blending learning environment.
 | Percent of teachers engaging in individual KITE lessons & percent of schools engaging in training modules. |

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| Classroom Critical Success Factor | Initial Metric for Analysis |
| 1. The “Engage” Digital Lesson will be completed with all students daily.
 | Classroom Implementation Study – Frequency of identified “Look Fors” in each classroom. |
| 1. Teachers will utilize “iTools” to engage students with interactive digital manipulatives. *(\*Better Tools & More Time)*
 |
| 1. Teachers will utilize the Problem Solving Interactive White Board Lesson. *(\*Better Tools & More Time)*
 | Usage reports from HMH. |
| 1. Students in need of additional support will utilize the Personalized Math Trainer to receive personalized learning, practice and formative feedback to reinforce previous teacher instruction on a daily basis. *(\*Better Tools & Informative Data)*
 | Usage report of personalized learning tools. |

**Professional Development and On-Site Support**

* Summer Trainings
* 2014-2015 Teacher District PLCs
* Differentiated Building Professional Development through Online Training Modules
* On-Site Technical Assistance

**Provided Equipment for Core Classrooms**

**Additional Technology Equipment:**

If you would like to equip additional classrooms with the Interactive Projector or purchase additional student devices **using building (FY 14-15) or PTA funds**, please communicate with the technology department. These requests will be reviewed after all initial installations are complete.

* Teacher Computer & Document Camera (\*already in place)
* Interactive Projector
* SMART Software
* 6 Student Devices per Classroom

**Timeline for Installation and Delivery**Installation of this equipment will be based upon current building room construction and logistics. An installation schedule will be provided in May for planning purposes. All classrooms will be equipped by the end of 1st semester.