

**5-yr Technology Use Plan**

Doty Middle School

California State University, Long Beach

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ETEC 530

Tues 5-7:50pm

## **Introduction**

Doty Middle School is a 6th - 8th grade school in the Downey Unified School District located at 10301 Woodruff Ave, Downey, CA, 90241. Their school wide focus is to Read Critically and the teachers emphasize the habit of reading with a pencil. The school is comprised of an English Language Arts, Math, Science, Social Science, Physical Education, Special Education, and a Fine Arts Department. Each and every department is focused on implementing the school wide focus and teaching the students valuable skills such as annotating.

The school staff are very community centered and implement many events to help organizations in the community. Currently, Doty Middle School is working on fundraising for Relay for Life, and they are also offering classes for parents and are providing childcare. Last fall, the school participated in a food and toy drive. The school emphasizes the idea of having a strong community presence.

With the large focus on student academics and community presence the school needs to upgrade its technology. This technology plan is intended to help Doty Middle School upgrade its current technology to help all departments in their mission, as well as help the school increase its community presence.

## **Goals/Objectives**

### **Goal**

Upgrade current DMS technology, purchase new technology to help all teachers teach their subject and the school wide focus, and purchase new technology to help DMS remain and promote a strong community presence.

### **Objectives**

1. Update or upgrade current DMS technology.
2. Purchase new technology whose main function will be to support curriculum in the classroom for teacher use.
3. Purchase new technology whose main function will be to support curriculum in the classroom for student use.
4. Purchase new technology to help DMS maintain and promote a strong community presence by allowing DMS to effectively communicate with the community members.
5. Purchase new technology to help DMS support or implement community programs.

## **Needs Assessment**

In order to best gauge the needs of Doty Middle School, an assessment needs to be administered to all involved parties. In order to implement this assessment, a planning committee must be established to help address all issues. The planning committee will be composed of the principal, IT personnel, a teacher from each department, and parents/members of the community.

This planning committee will be responsible for creating, implementing, and analyzing a needs assessment survey.

- The survey will consist of several sections as they relate to specific needs. A survey will be conducted for the school as a whole in terms of what technology needs are present.
- A survey will be given to the teachers to see what they deem to be the best technology to fit their needs in the classroom, or a technology use intent survey. This survey will be much more detailed and will have space for the teachers to describe their intent of use with the proposed technology
- A survey will be given to the teachers to gauge individual levels of comfort with using technology, and past or current failures/successes in using technology in the classroom.
- A survey will be given to the students to gauge their technology access at home and the types of technology they bring to school.
- A survey will be given to members of the community to gather input on how the school can best keep being an active part of the community and how they can best communicate and keep in touch with the community.

## **Technologies**

### **Existing**

Currently, DMS's technology inventory consists of several laptop carts, approximately ten, with Chromebooks, Dell computers, and E3's. Some classrooms have two to three desktops for student use along with the teacher's computer. DMS also has some classrooms equipped with speakers and a microphone for the teacher, and they also have two public announcement systems.

Upgrades are currently in the works. Downey Unified is working towards upgrading all teacher computers to Surface Pro 4's. The computer carts are also receiving a software upgrade.

### **Proposed**

The proposed technologies for Doty Middle School include:

1. One-on-one Dell Chromebooks for students [\$215.00/each]

Every classroom should have a readily accessible class set of Chrome books to facilitate instruction, allow students to collaborate, and allow for quick research.

Having access to laptops for the entire class can allow the teacher to have ‘teaching moments’ when the class has questions about a topic or issue and the teacher is able to see the benefit of straying from the day’s lesson to allow for more in depth learning that he or she could not give the students without the use of the internet. Having computers in the classroom also allows the teacher to teach students how to be good digital citizens and how their interactions online can be permanent. This can be another example of a teaching moment as the teacher demonstrates and models for students the importance of online safety.

## 2. Interactive Whiteboards for each classroom [\$2,000 - \$4,000/each]

Every classroom should have an interactive whiteboard that will allow the teacher to interact (annotate) text on the whiteboard, allow students to annotate or walk up to the board to complete a task.

With an interactive whiteboard, the teacher can implement lessons and activities that are geared more towards the kinesthetic learning. Activities can be centered on individual or a group of students and ask them to interact with objects or to accomplish a specific task. Interactive whiteboards will allow students to show their knowledge and understanding through more than paper and pencil.

## 3. Microphone speaker system in every classroom [\$1,100/each system]

Every classroom should have a microphone speaker system to help the teacher and students be heard loudly and clearly. This is especially effective for soft speaking students or teachers or students who are hard of hearing.

The microphone speaker system will allow the teacher to promote faster transitions when starting or stopping group work or work in which the students will be collaborating. By using the microphone to prompt students to stop their current work and give their attention to the teacher, the teacher can grab the students attention much quicker than using another type of signal. The system is also useful for student presentations. The system will allow soft spoken students to be heard in the back of the room.

## 4. Website Management System for Community Involvement/Communication

[Hourly wage for workers]

Doty Middle School should implement a management system specifically community programs and outreach that goes beyond the school web site. The management system should include communication to the community about DMS programs and involvement, as well as suggestions for how community members can join or contribute.

## **Maintenance**

Maintenance will be an ongoing process that will extend throughout the five-year plan. Upgrades in software will be scheduled on an 'as needed' basis. Faculty members using the technology will be able to inform the IT member of the planning committee of any issues that arise with the ongoing use of the technology.

The member in charge of keeping the website management up to date will need to be experienced in the creation, use, and maintaining of an online webpage. Any issues that arise should be reported to one of the main committee members, for example the IT personnel or the principal.

## **Professional Development/Training**

Using the initial survey on teacher experience and comfort with technology results, professional development trainings can be created by having teachers who are more comfortable using technology teach and mentor those that are not. Depending on the number of experienced teacher vs. inexperienced teacher, each experienced teacher can have a small group of inexperienced teachers to mentor and guide along the implementation of this five-year plan. As the inexperienced teachers gain experience, the lead teacher may not be needed as often as the initial set up. These groups can also discuss the results of the student technology access survey and propose ways that teachers can implement the use of student brought devices when teaching and working with the curriculum.

Other methods of training will include faculty wide training on the use of new software, when applicable, and individual training completed by faculty members who are interested in learning specific uses for the technology or software.

Training can also take place for the person in charge of the website maintenance. If he or she needs additional assistance, then other teachers may volunteer to help. The volunteers will then need to be trained by the person in charge.

Within these break out groups and faculty trainings, the idea of digital conduct and digital citizenship should be emphasized and discussed. All involved members of this technology plan will discuss and create rules and regulations for the proper use of technology in their school/district. If guidelines already exist, they can be used as a starting guide to the school based guidelines of acceptable use of technology.

In regards to digital citizenship, teachers should discuss and be aware of their role as facilitators and role models of students who are interacting with and leaving their mark in the digital world.

An emphasis should be placed on responsible posting, discussions, and interactions, as well as the consequences of cyber bullying and the dangers of cyber predators.

Because of the above mentioned risks of online and technology use, educators should be aware and have guidelines in place to help keep risks at a minimum and help promote a safe learning environment for all students. With the proper steps and precautions, Doty Middle School's staff and students will benefit from the large implementation of technology use.

### **Funding Possibilities**

The funding for this five-year technology use plan will be provided, in part, by Downey Unified School District. District funding is based on a hypothetical budget of \$60,000. This fund will be used in part to purchase the new technology, purchase software upgrades, and to pay the teachers who are covering extra duties, such as the maintaining of the community centered webpage.

Along with district funding, the school can encourage teachers who completed the technology use intent survey and had creative ideas to seek individual funding from places like donors choose programs, or they or the school may apply for grants.

Lastly, the school will use E-rate and receive either a reduction in costs, or both a reduction and extra funding.

### **Assessment and Evaluation**

#### **Evaluating Plan's Overall Progress and Impact**

##### **Classroom Technology Use**

The evaluation of Doty Middle School's five-year technology use plan will have several components to best gauge the results of the technology implementation by the teachers and students. One assessment will consist of how often, for what purpose, and which Common Core State standards are addressed when the teachers use the technology in the classroom.

The first part of the evaluation will be a goal setting session created by the planning committee. They will create goals for each department to try and fulfill through the use of technology to supplement their instruction. For example, the English department's goals may be to have students research a topic through the use of credible sources. The fine arts department may have students create a webpage that displays their creative writing, or art pieces, videos, etc. The History department may have students create a timeline with 85% accuracy of dates and facts. Depending on the units of study, the projects and assessment of technology use will be measured differently. This technology implementation will go on for a set number of weeks, and the planning committee will set a check in day for the staff to report their progress or lack of.

During the check in day, staff members will present their individual findings to their department planning committee member and a discussion will follow on how best to proceed with the results. For teachers whose students met the goals, the goals may be modified to include another component, and for teachers whose students did not meet the goals, the goals will be modified to focus on achieving one more specific goal before attempting again. The check in day will serve as a collaboration day where teachers can learn from one another about what works, what may work, and what did not work at all. After the collaboration, all teachers will go back to their classrooms for another set of weeks to implement the new goals and gather data.

After the second set of weeks, the teachers will once again come together to report final findings. These final reports will serve as the assessment data for the success of the use of the technology plan.

### **Community Presence**

The assessment for the community based webpage will be based on the community's perspective on the way the school communicates and maintains a presence. Through the use of the webpage, the school will involve itself with or create community based events and use the webpage solely to communicate with the community to assess its effectiveness. After the events, the community members and the staff in charge of the webpage will take a survey assessment to gauge the percent of community members reached. The survey will also include a place for suggestions for improvement and general comments.

### **Communicating Evaluation Results**

In communicating the evaluation results, Doty Middle School will create a data wall that indicated the level of progress met (i.e. goals met) for each individual department. The data from this collection will then be placed into a flyer or letter that will be shared with the community. Evaluation results can also be posted on the community webpage or displayed at the school site for staff, students, and parents to see.

### **Conclusion**

Through the proper implementation of this plan, Doty Middle School will be able to upgrade its classrooms to support teacher and student centered activities and engage the 21<sup>st</sup> century student, as well as develop and maintain a strong presence in the community to help support community members and organizations. This technology use plan was developed with the idea in mind that all teachers and students should be knowledgeable of current technology use and the benefits of implementing technology use in the classroom to support a variety of activities such as research, collaborative writing, collaborative creation of webpages, proper citation and documentation of sources, and meaningful social interactions. It will be the teacher's role as the role model, mentor, and facilitator to embed technology into daily or weekly lessons that are engaging and supportive to the standards students are working towards mastering.