

*The MBUSD iPad Pilot
2011-12 School Year*

Rationale

The MBUSD Technology Committee met during the 2010-11 school year to examine the state of existing technology in MBUSD, study best practices in research and surrounding districts, and make recommendations for an updated technology plan. One of the major components of the recommendations of the committee was to consider a pilot using tablet technology that would allow students to frequently use iPads in the classroom.

The District has made a commitment to 21st Century Education, which encourages teaching and learning to go from passive learning to engaged and active learning, with a focus on the 4 Cs:

- Critical Thinking
- Communication
- Collaboration
- Creativity

It is expected that this iPad pilot will result in changing teaching and learning in the classroom by:

- Individualizing Instruction
- Dramatically increasing the use of technology in our schools
- Supporting the “middle student”
- Implementing e-books such as Algebra I
- Making learning more contextual
- Accessing things students can’t see in the classroom
- Better understand through video
- Increased participation in class
- Increased feedback for students
- Providing more ways for teachers to check students’ understanding
- Creating an interactive white board for MS and HS
- Bringing more outside information into the lesson
- Providing more resources for GATE students
- Increasing student collaboration
- Allowing students to more easily create portfolio documents
- Go beyond the walls of the school

Technology is only one instructional tool, at a teacher’s disposal, but it can be an incredibly effective and powerful one. Currently, even with a computer to student ratio of 1:4, MBUSD student do not utilize technology frequently. The technology committee believes that this iPad pilot will dramatically increase the impact of technology on our students.

Scope

The pilot will take place in every K-12 school in the district. Teachers participating in the pilot will have access to a class set of iPads. One class set will be shared by two teachers in the pilot.

- Each elementary school will have one grade in the pilot. Up to 24 elementary teachers could be pilot participants. All teachers in that grade will participate. It is expected that students in each elementary pilot classroom will use the iPads frequently, up to an hour a day.
 - Materials Required
 - Up to 12 carts of iPads (25 to 30 per cart)
 - Wireless access in each pilot classroom
- The middle school and high school will each have eight teachers in the pilot.
 - Materials Required:
 - 8 iPad carts (30-35 per cart)
 - Wireless access in each pilot classroom.
- If funding is available, Algebra I pilots will also be used, where the students in the pilot are actually assigned an iPad and have all textbook and assignments from that class on the iPad.
 - Materials required
 - 1 iPad for each student. Students will either borrow or lease the iPad from the District.
 - Wireless access in the algebra classroom.
 - Support for handling a leasing program.

Staff

District Level:

Carolyn Seaton, the Executive Director of Educational Services, will oversee the project.

Karina Gerger, the Teacher on Special Assignment for 21st Century Teaching and Learning, will be assigned to this pilot for approximately 40% of her job duties. It will be their responsibility to arrange training, provide support, and document the successes and challenges of the pilot.

Teachers

In the elementary school, a team of grade level teachers may apply to be a part of the pilot. For a grade level to be considered, each member of the team must agree to be an active participant in the pilot. For example, if the 4th grade at a school has four teachers, all four teachers must be willing to participate. It is hoped that different schools will have different grades in the pilot, since that will provide more diverse learning that can lead to a smoother full implementation in later years. Applications from the teams will be received by Carolyn Seaton and will be evaluated by the district.

In the secondary schools, the principals will determine, in consultation with their leadership teams, major focus areas of the pilot. Science and math may be the focus areas for both the middle school and the high school.

Elements of pilot participants who will succeed in the this pilot will be teachers who:

- Will participate in a mandatory training in the summer to prepare for using the iPads in the classroom.
- Are eager to learn about iPad technology, and have demonstrated a willingness to learn how to apply new technologies to the classroom.
- Have demonstrated the ability to work well as a team, communicating and collaborating on how to best address the needs of students
- Are willing to meet and discuss the implementation monthly at the District level, so that lessons learned can be utilized if a full implementation is to occur. Teachers will be paid at the hourly rate for district meetings.
- Will visit schools in other districts to learn best practices and share that information with other pilot teachers.

Staff (Continued)

Information Technology

Eric Sangalang, Director of Information Technology, will provide support for this project. Three primary elements of support will be necessary:

1. Preparing and maintaining the iPads. IT staff will prepare all of the iPads for distribution to the teachers, classrooms, and students. Additional Apple computers will be necessary for this work.
2. Installing wireless networks in all pilot classrooms. The District has contracted with consulting company that can provide this support.
3. Supporting, repairing and maintaining iPads and all technology. Staff recommends an additional Systems Technician to support this effort and all district technology.

Support for Pilot Participants

Participants in the pilot are expected to be self-starters who are willing to invest time in learning about the applications of the iPad in the classroom. As a technology pioneer for our district, participants will be exploring ideas, trying new concepts, learning from others, and doing the things it takes to implement new technology in the classroom.

Karina Gerger, the Teacher on Special Assignment for Twenty-First Century Teaching and Learning, will dedicate approximately 40% of her time to supporting the participants in the iPad pilot. Carolyn Seaton, Executive Director of Educational Services, and Superintendent Michael Matthews will also support the project. Principals in each of the schools are expected to provide support by being knowledgeable of the program, participating in the team discussions, and providing logistical support for the pilot teachers.

The District's Information Technology Department will provide support by doing all it can to keep all equipment working and operational., and by installing and maintaining wireless access in each of the pilot classrooms.

The District will provide iPads to each teacher selected to participate in the pilot. The district will provide two one-day training sessions in the summer, one in June and one in August. If off-site conferences are available, the District will encourage pilot teachers to participate.

Teachers in the pilot should be a primary source of support for each other. This pilot has a much greater chance of being successful if teachers make the time to share successes, failures and frustrations. There should be regular, twice a month meetings in each school where pilot participants discuss the implementation. It is hoped that there will be many more informal conversations.

Karina Gerger will arrange for participants to visit schools that have implemented iPads in the classroom. Those teachers can bring back what they have learned and share it at school level and district level meetings.

Karina Gerger will host once a month district meetings, where pilot participants can discuss model practices, learn from each other, troubleshoot problems, and give key data that for district updates to the Board of Trustees.

If the District determines that a one-to-one borrow/lease program will be utilized with Algebra I students, the Manhattan Beach Education Foundation will provide support for handling the logistics of the lease program.

Expected Results and Accountability

It is expected that this iPad pilot will result in changing teaching and learning in the classroom by:

- Individualizing Instruction
- Dramatically increasing the use of technology in our schools
- Allowing students to repeat instruction if needed, preventing gaps in skills from developing
- Supporting the “middle student” by
 - dramatically increasing the frequency of checking for understanding, and
 - allowing access to continuous instruction
- Implementing e-books such as Algebra I
- Making learning more contextual
- Providing the means for students to instantly access databases, libraries, lectures, and other multimedia instructional tools while sitting in class.
- Utilizing standards-based video content as a real time instructional tool
- Increasing participation in class
- increasing the frequency, efficiency, and effective impact of teacher feedback to students
- Providing more ways for teachers to check students’ understanding
- Creating an interactive white board for MS and HS
- Giving students more access to primary source materials in class
- Providing more resources for GATE students
- Increasing student collaboration
- Creating student e-Portfolios that contain multiple forms of media and demonstrated growth and learning
- Improving student-teacher communication through interactive wikis, blogs, and student chat threads
- Improving assessment scores in ELA and Mathematics

To measure results, the following data will be considered:

- Observation data
- Anecdotal data
- Parent Survey Data
- Student Survey Data
- Teacher Survey Data
- Assessment Data

Staff will provide a report of this data to the Board of Trustees in November, January and March of the 2011-12 school year.

Budget

The costs for the pilot are significant, but it is hoped that most of the costs can be covered by grants, donations, non-general fund monies and one-time revenues from the 2010-11 school year.

Costs for the classroom pilots will be approximately \$500,000. This includes up to 20 carts of iPads for student use, an Apple laptop computer for each cart, iPads for each of the teachers involved in the pilot, and iPads for the IT staff who are supporting the project.

There will be additional costs for apps for the iPads. During the summer, the participants will meet with the District and determine which apps will be purchased for the iPads.

There are other costs associated with the project, such as providing wireless connections to the classrooms, but those are long-term projects that the district was already planning to do. Wireless costs for the pilot program would be between \$25,000 and \$50,000. The District intends to move towards a fully wireless environment for all classrooms and spaces no later than September, 2013.

If there are pilots for Algebra I classes, some of the costs will be potentially mitigated by a parental option to lease the iPad for their child. This optional lease program is being used successfully in several school districts across the nation. If the District finds that the pilot is successful, this optional lease program will be a financial cornerstone of any plan for district wide full implementation.

Additional Recommendation

The original recommendation of the MBUSD Technology Committee was to provide each interested teacher with an iPad. The rationale for this was as follows:

- If the pilot goes well, which we expect that it will, a logical next step would be to either (1) get an iPad cart in every room, or (2) provide or lease iPads to MBUSD students. For this transition to go well, having teachers who are already familiar with the power of an iPad would make the transition much easier.
- Staff believes that teacher innovation will lead to improved instruction, and that we will open the floodgates of innovation by putting the iPad in the hands of as many teachers as possible.
- The major obstacle to this recommendation lies in the fact that wireless access will not be available in each classroom, so there may be frustration in not being able to fully access the power of the iPad while in the classroom. Staff believes that the implementation plan and timeline for district-wide wireless access should be clearly conveyed so that teachers are fully aware of the plan.

Staff still supports this recommendation and will pursue alternate means of financing to support it.

Schedule for Pilot Participants

June, 2011

- Board Approval of Pilot
- Selection of Participants in the Pilot
- Provide iPads to Pilot Participants
- Provide 2 Hour training to Pilot Participants
- Begin installation of wireless access in classrooms of pilot participants
- Order iPads for full pilot

July, 2011

- Hold day-long inservice of pilot participants to train on uses of iPads in the classroom.
- Continue installation of wireless in pilot classrooms
- Begin preparing iPads for the pilot.

August, 2011

- Test iPad carts and wireless in each pilot classroom.
- Provide one more day of inservice for pilot participants
- If there is a secondary 1:1 iPad pilot, meet with parents and students selected to be in the pilot to review borrowing or leasing the iPad, and agreeing to participate in that pilot.
- School Begins

September, 2011

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training
- October, 2011
- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training
- Survey of teachers, parents and students in the program

November, 2011

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training
- Update to Board of Trustees on iPad pilot
- Update to Board of Trustees on wireless implementation in the District

December, 2011

- Monthly District meeting of all participants 3:30 PM – 5:30 PM

- Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training

January, 2011

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Survey of teachers, parents and students in the program
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training
- Update to Board of Trustees on iPad pilot
- Update to Board of Trustees on wireless implementation in the District

February, 2012

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training

March, 2012

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training
- Update to Board of Trustees on iPad pilot
- Update to Board of Trustees on wireless implementation in the District

April, 2012

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Survey of teachers, parents and students in the program
- Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training
- Evaluation of Pilot
- Determination of whether to expand the program into other classrooms and/or expand the program into a 1:1 borrow/lease program

May, 2012

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Every Two Weeks: Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training

June, 2012

- Monthly District meeting of all participants 3:30 PM – 5:30 PM
- Pilots from each school meet to collaborate, plan and consider successes, challenges, needs, and requests for additional training