Overview of Technology Plan 2014-2018

The Oakland Unified School District is committed to graduating all of its students, college, career and community ready. In this technological age and as we shift to the Common Core, it is imperative that we provide students a 21st century educational experience which rests on a plan for technology.

The Technology Services team conducted multiple engagements with many stakeholders to assess the infrastructure, devices, wireless access, bandwidth, and professional development needed to bring our schools to the highest standards around technology. Figure 1 illustrates the methods of collecting data that were part of engagements for the Common Core, Online Testing Readiness, a Personalized Learning planning grant, and the Local Control Accountability Plan (LCAP).

Figure 1

It was evident how far we had to go to provide students an equitable, supportable, sustainable, and robust technology infrastructure that could support the teaching and learning required under the Common Core.

Technology Services set the mission to build and support the best possible technology systems, tools, and infrastructure to create an equitable and supportable learning environment for all students. The team also set priorities to focus on Student Learning, Equity & Access, Productivity, Data and Assessment, Supporting Teachers & Staff, Infrastructure, and Data Safety, Security, and Ethics.

A focus for Student Learning is to implement a platform of learning resources that embrace and maximize the flexibility and power of technology to reach all students with differentiated needs. This personalized learning platform will be called OUSD1, a portal for resources, grades, an early warning system, assessments, and stakeholder communication.
The technology plan’s principle Infrastructure tenant is to ensure all schools have broadband access to the Internet and wireless connectivity. Most importantly, staff wants to ensure equity across school sites with a special focus on the West Oakland STEM Corridor. The chart below shows the network speed increases that are part of the plan. Even without understanding megabits per second, one can see the exponential speed increase over the years.

<table>
<thead>
<tr>
<th>School Type</th>
<th>WAN speed 2013</th>
<th>WAN speed 2014</th>
<th>WAN speed 7/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>20 Mb/sec</td>
<td>100 Mb/sec</td>
<td>1 Gb/sec (1000Mb/sec)</td>
</tr>
<tr>
<td>Middle Schools</td>
<td>50 Mb/sec</td>
<td>200 Mb/sec</td>
<td>1-5 Gb/sec</td>
</tr>
<tr>
<td>High Schools</td>
<td>100 Mb/sec</td>
<td>500 Mb/sec</td>
<td>1-5 Gb/sec</td>
</tr>
</tbody>
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The timeline below shows highlights of the infrastructure deployment. Note that the district will have new state-of-the-art wireless in every classroom fore the end of school in 2015.

Technology Services plans to provide technology tools for productivity and efficiency across the District that include upgrading older technologies and providing new systems for Human Capital, Data, and Content Management.
Data and Assessments are key to get timely and actionable feedback and enable meaningful analysis. Technology Services works so that data systems are linked and appropriately available. During the term of the plan, staff plans to deploy the following systems: Content Management, Data Warehouse, Human Capital Data Management, Student Information, and Finance.

All the infrastructure and systems require excellent Support. Technology Services and Leadership, Curriculum, and Instruction (LCI) plan to reinvent support and professional development. This has started with the naming of Instructional Technology Teacher Leaders at each site. This was a success for online testing and, going forward, the focus is going to be teaching and learning.

All systems are maintained with an eye toward Data Safety, Security and Ethics. Part of the plan is to educate teachers and students about appropriate, safe, and ethical use of information technology.

This technology plan covers four years: July 1, 2014 – June 30, 2018. All major initiatives will be complete in this timeline and each has funding from sources including one-time state funds, federal E-rate funds, Measure J funds, and the general fund. The following graph illustrates the funding sources for major infrastructure milestones.