Dear Superintendent Cortines,

Thank you for your warm reception during our visit last week. Over the course of two days, we were able to learn about the current status of LAUSD technology projects, specifically MiSiS and the district’s use of instructional technology.

As you know, our visit was in response to your request for support in addressing technology concerns at LAUSD. Our purpose was not to focus on the origin of the concerns but instead to focus on recommendations for how the district could improve its current situation and plan for the future based on effective practices we’ve seen from other districts across the country. Accordingly, this document provides notes and specific recommendations based on our observations. It is not intended to be a comprehensive overview or formal audit and will reinforce issues that have been identified by your team. The document makes recommendations related to improvements to the MiSiS student information system, use of technology to improve instruction across the district, and general observations that cut across district practice. You will find that these recommendations align with other analyses that you’ve already conducted and try to capitalize on the opportunity to embed strategies and systems for sustained continuous improvement.

We commend you and other district leaders for being open and honest regarding the state of technology implementation across the district. Everyone we met with was forthcoming about where problems existed and approaches that were underway to address them. Senior leaders had a solid grasp of the complexities of the current situation, a sense of urgency to address long-standing problems, and were actively implementing practical steps to resolve ongoing challenges. Even over the course of the few days we spent on site, notable improvements were made.

Sincerely,

Richard Culatta
Director of the Office of Educational Technology
United States Department of Education
I. Instructional Technology

There is tremendous potential for technology to have a significant positive impact on the quality of learning across LAUSD. Successfully implemented, technology can increase equity of access to resources and educational experiences for all students across the district and increase capacity of students to become creators of artifacts that both solve real-world problems and demonstrate better understanding of educational content. Technology can also help increase student engagement, which in turn has been shown to improve attendance and reduce behavior problems in other districts. Technology can provide ubiquitous access to educational experiences thereby minimizing learning gaps of the district’s highly mobile student population. Even with the shifting demands of implementing the district’s 1:1 pilot the Common Core Technology Program team has remained dedicated to the goal of using technology to improve equity of access. Additionally, the team exhibited an unfettered desire to create opportunities for helping teachers in their use of technology in supporting teaching and learning.

We have identified a number of challenges that limit LAUSD’s ability to benefit from the positive impact of technology. In order to benefit from current and future investments in educational technology, we recommend addressing the following six issues:

1. Lack of District-Wide Instructional Technology Strategy

Among the most significant gaps we identified was the absence of district-wide instructional technology leadership. There is currently no Chief of Instructional Technology for the district, and instructional technology support does not exist for any of the schools outside of the CCTP pilot program. In addition, there is no district educational technology plan, goals, or metrics for success for how technology will support learning at the district level. Finally, intra-department communication is incongruent. For instance, while selection of a Learning Management System (LMS) is underway, the process has not included participation from all parts of the Instructional Technology Department that are necessary for successful implementation of an enterprise system such as an LMS.

Recommendations:

- Create a Chief of Instructional Technology (or equivalent) position reporting directly to the Deputy Superintendent for Instruction.
- Develop and publish a district technology plan aligned to overarching goals for the district.
- Immediately engage all necessary stakeholders in developing a detailed implementation and communication plan for the new Learning Management System. This should include significant planning around integration with MiSIS and other existing LAUSD systems, as well as professional development plans. We strongly recommend conducting a small pilot of the LMS before implementing at scale.
2. All schools should have an Instructional Technology Plans in Place before Receiving Mobile Devices
Currently, some schools receiving devices through the CCTP program have not developed plans for how the devices will be used to support learning prior to receiving devices. As a result there is no common vision for how devices should be shifting learning and teaching within schools, making measuring impact difficult if even possible.

Recommendations:
• Require each school to create a clear but light-weight Instructional Technology Plan aligned to individual school improvement goals, outlining how the use of technology will support school goals to improve teaching and learning. These plans should ideally include input from all stakeholders and be posted publicly for parent and community input. The district should require this be done district prior to any device distribution.
• Support schools in creating their Instructional Technology Plan including developing a template noting major ‘Non-negotiable’ elements that must be addressed in all plans while balancing discretion specific to each school site’s culture. District should establish a process for reviewing and providing feedback into school-level technology plans. We recommend this as the first step in each time a district Virtual Learning Complex facilitators (VLCs) – individuals assigned specifically to support the effective instructional use of technology – begin to work with a new school site. Plans would be completed with the VLCs and require the approval of the Chief of Instructional Technology.

3. No Metrics for Instructional Success Established and Reported:
Tied to the lack of instructional technology plans, there is also a lack of established metrics of success for the CCTP. Accordingly, it is difficult to show the impact of the investment or know which pilot practices should be scaled across the district more widely or shared as examples to the field at large. Conversely it is not clear which practices may be less effective and therefore should be improved upon.

Recommendations:
• Develop a series of metrics to use when evaluating the effectiveness of district instructional technology programs, especially CCTP. Examples of items to consider may include, student academic performance, attendance, amount of discipline problems, parental engagement, teacher time, access to expertise, etc.
• Display effectiveness data based on the metrics regularly and prominently across the CCTP team (for example could be displayed on a flat-screen monitors in the CCTP office).
4. Instructional Support for Technology not Commensurate with District Need
The use of Virtual Learning Complex facilitators (VLCs) – individuals assigned specifically to support the effective instructional use of technology – in the CCTP is consistent with best practice from the field. However, the number of VLCs (28) and length of time they remain assigned to a school do not match the demand for an implementation the size of CCTP.

Recommendations:
• Increase the districts capacity for supporting teachers and leaders using technology commensurate with the size of device deployment. This could be done by increasing the number of VLCs, identifying school-based instructional technology employees with oversight provided by the district-based VLCs, or a variety of other models.
• Pilot approaches for integrating technology professional development as part of the district’s overall professional development strategy.

5. Heavy Dependence on Commercial Learning Resources
The district is heavily dependent on a single commercial product for providing digital learning resources, which has plagued the project since the initial rollout. Adequate procedures for approving new software to be added to student machines are not in place. Quality openly-licensed educational resources are not being used systematically as a part of the district’s learning resources despite the significant financial and other advantages that they could bring to a district of this size. While mobile device management and tracking systems are currently in place and functioning well, process should be reviewed to ensure support for additional devices in light of the planned expansion of supported device types.

Recommendations:
• Mitigate dependence on any single commercial product by piloting the use of Open Education Resources (OER) and consider use of open resources as cost cutting and planning for sustainability. Consider projects such as the Learning Registry or California’s MyDigitalChalkboard initiative as sources for free digital learning content. Enable LAUSD teachers to share digital content they have created with other teachers across the district.
• Establish a clear school-level process for the approval of new apps to be added to devices that takes into account educational benefits as well as compliance with federal regulations such as the Family Educational Rights and Privacy Act, Children’s Internet Protection Act, and Children’s Online Privacy Protection Act.
• Rethink the district’s acceptable use policy so it is differentiated by age (see Boston Public Schools for an example) and aligns with the district’s overall vision for instructional technology.
6. Sharing Successes and Best Practices:
While those with whom we met could each speak to pockets of success throughout the district and specific teachers and principals whom they would hold up as examples for others, no formal path exists for identifying, capturing, and sharing these stories and examples of success and effective practice.

Recommendation:
- Establish a clear mechanism for highlighting examples of successful use of technology in the service of learning. This could include highlighting teachers and students’ learning on the district website, establishing an online repository of stories, or other methods for capturing and sharing examples.

II. MiSiS Project

Overview:
MiSiS infrastructure has been stable for a number of weeks and there is qualified and able technical talent now on the project to begin the rapid eradication of identified issues. A clear product owner was identified during our visit, which will help to build the communication channels and culture needed to successfully move through the next couple of months of critical risk and move into a reliable pattern of system enhancement and rollout. Each member of the MiSiS team with whom we interacted was receptive to change and process improvements to support students and staff within the district.

1. No Clear Product Owner
When asked, individuals could not identify a single accountable party for MiSiS. Many dedicated and talented employees felt as though they were “on hold” awaiting direction.

Recommendation:
- Identify and empower a clear product owner. This person is the “conductor” of the project, ensuring a coordinated overall vision and that constant and productive communication and work happens across all responsible teams and parties. (This change was implemented while we were visiting – Diane Pappas has clearly been announced as the lead for MiSiS)

2. User Support Lagging
Bug submissions are handled over the phone, and by disparate help desks. While there are well-received focus groups, there are not other mechanisms by which system users can report an issue or idea for improvement.

Recommendations:
- Engage system users in identifying and reporting bugs and usability improvements. Recommend implementing an option to allow system
users to provide feedback directly from the site (versus calling a help desk). This feedback must be acted upon regularly in order to develop a renewed sense of trust. This practice will provide continual improvement opportunities to make MiSiS serve students and teachers better in the future.

- Expand communication with MiSiS team members, the broader LAUSD staff, parents, and the community. It is fine to not have all the answers, as long as there is a path to arriving at them. Prolonged silence breeds mistrust.
- Encourage a culture of honest communication, where issues and concerns can be raised and addressed early, before they become problems. When negative feedback is discouraged or set aside, it creates an incentive for people to keep information to themselves, with potentially disastrous results.
- Use the time between now and February to institute development best practices such as regular “situation rooms” (in person meetings where everyone needed to take action or make a decision is present), automated testing, peer code reviews, and constant user feedback loops to ensure what is being built and deployed actually meets end user needs. Going forward, the team must build in dedicated schedule time for bug resolution and infrastructure tasks (e.g. setting up a test server), and the business owners must recognize that these tasks are a critical part of a successful project.

3. No Established Effectiveness Metrics
While there are dashboards in place reflecting system information (such as uptime, available system resources), this dashboard is not widely distributed or shared. Student-focused outcomes are not present on the dashboard (such as # of students unable to access a transcript to include in their college applications).

   Recommendations
   - Make more detailed choices about task prioritization and launch criteria. In cases where a deadline is immovable, declare that upfront so that other variables can shift to accommodate. In cases where the deadline has some flexibility, make the other priorities explicit. Iterative development allows for fixing and modifying a tool once it is launched, so it is not always necessary to get every exact piece right before allowing users to benefit – as long as it is communicated that a new feature may still be under development.
   - Display MiSiS dashboards throughout ITD. Metrics should include student-focused outcomes as well as system information (uptime, etc.). They should be displayed clearly throughout the areas where the teams are working and updated regularly (in real-time where possible) to help ensure the entire team is focused on the needs of the students.
III. Cross-Cutting Issues

Overview:
It is worth noting that the district’s Internet connectivity infrastructure and its planned expansions are designed to meet both current needs as well as forecasted demands on the system. Additionally, to a person, everyone we met approached our visit and questions with openness and demonstrated clear desire to improve practice and resolve issues as quickly as possible. While a number of the issues highlighted above are specific to the projects we reviewed, we have several recommendations to be implemented across the district to improve technology rollouts in the future:

- **Create External Advisory Group** – this would help the district set a clear vision for all technology (instructional and otherwise) and ensure alignment with the vision set by district leadership. We would be happy to recommend potential members for your consideration.
- **Consolidate multiple support centers** – there are currently multiple, independent tech support systems in place (MiSiS support, district help desk, IT support for non CCPT schools, and IT support for CCTP schools). Consider consolidating these support centers so that all users have one central point of contact and support data can easily be tracked and representative of the entire district.
- **Increase coordination between Instructional Technology and ITD** – this will be dramatically improved with the creation of a Chief of Instructional Technology who would work closely and regularly with the Chief Information Officer.
- **Implement Product Management** – while the district has clearly focused on developing project management approaches, it is lacking when it comes to *product* management. The District should establish a clear product owner for each IT system or Instructional Technology tool.
- **Launch new systems in beta** – recommend launching all future technology projects in beta (pilot mode) so users are aware that some bugs may be present and developers can learn from initial user feedback before scaling widely.

IV. Resources

As mentioned, here are a few of the resources from within the Department of Education and from other school districts around the country that may be of assistance moving forward:

- The Department’s [Privacy Technical Assistance Center](#).
- The Department’s infrastructure guide, *Future Ready Schools: Building Technology Infrastructure for Learning*.
- [The U.S. Digital Services Playbook](#) can help to shape conversations moving forward around both project and product management.
• The “Online Professional Learning Quality Checklist” from the Department’s Professional Learning Toolkit.
• This link to the Denver Public Schools initiatives around personalized professional learning.
• More details about Arlington ISD in Texas’s Transforming Classrooms Through Technology Innovation grants.
• St. Vrain Valley School District in Colorado’s Technology-Curriculum Vertical Alignment document.
• Boston Public School's jointly-created and Acceptable Use Policy differentiated by grade levels.