

SCHOOL2HOME EVALUATION REPORT 2017-2018

Executive Summary



Report Prepared by the Metiri Group

The Metiri Group was selected to serve as the Independent Evaluator through a competitive process by the California Emerging Technology Fund (CETF) to implement the Evaluation Core Component of School2Home, an initiative to integrate technology into teaching, learning, and parent engagement at low-performing middle schools in California. The Metiri Group is a small, woman-owned consulting firm that specializes in K-12 educational technology and 21st Century Learning. Metiri has a national and international reputation for systems thinking, evaluation, research, and innovation. Located in Southern California, the firm has a clientele that includes K-12 schools and agencies, foundations, and private sector firms.

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Introduction

Public schools in California face a series of unique challenges. Compared to other states, the student population of California has a larger share of English learners (23.2%, highest in the nation) and a higher percentage of students from low-income families (54.1%) than the national average. Overall, students from these groups rank well below the student average performance on academic testing. Clear achievement gaps also exist among students of certain ethnic groups. For example, Asian and White students are far more likely to perform better than Latino or African American students on academic testing.¹

Recognizing that the Digital Divide consists of similar demographics to the Achievement Gap, the California Emerging Technology Fund (CETF) had the foresight not only to understand the potential of technology in improving educational achievement but also to act. In 2009, CETF brought together leaders from the private, public, non-profit, and philanthropic sectors to design an evidence-based initiative to help close both the Achievement Gap and the Digital Divide in California. The result of this effort was School2Home, a comprehensive intervention designed to help build the capacity of low-performing schools to integrate technology to improve teaching, learning, and parent engagement.

School2Home is the signature education initiative of CETF, whose mission is to close the Digital Divide in California. Since its inception, School2Home has been implemented with 37 partner schools in 11 districts throughout California. School2Home consists of 10 Core Components. Evaluation is 1 of the 10 Core Components and is vital to its success. Evaluation results are presented to the CETF Board of Directors to inform their guidance of School2Home implementation and its evolution in the future.

Purpose of the Report

This report summarizes the results from the School2Home Evaluation for the 2017- 2018 school year. During that time period, School2Home was actively implemented with 22 partner schools. The report is intended to provide useful information that School2Home Management, as well as school leaders and staff, can use to make decisions, clarify options, identify strengths and weaknesses, and enhance implementation fidelity to drive continuous improvement.

The Evaluation was conducted by the Metiri Group, an Independent Evaluator selected by CETF. The Evaluation Framework, developed by CETF, required a qualitative-formative and summative-quantitative analysis of a wide range of both primary and secondary data sources. Evidence from these sources was used to address 5 research questions, based on the School2Home Logic Model:

Research Question #1: School2Home Implementation Fidelity

To what extent and how are the participating schools implementing the School2Home 10 Core Components with the support of the California Emerging Technology Fund?

Research Question #2: School2Home Integration into Classrooms and School Culture

To what extent have participating schools integrated instructional technology into the fabric of the school to actively engage students with technology, involve parents as learning partners, and shift the school culture to one of high expectations and data-driven continuous improvement?

¹ Information from Ed Data express available at: <https://eddataexpress.ed.gov/state-tables-main.cfm>.

Research Question #3: School2Home Effect on Digital Adoption and Inclusion

To what extent have parents increased their use of broadband technology at home to support the education of their children, model good digital citizenship, and improve the lives of their family members?

Research Question #4: School2Home Impact on Student Outcomes

To what extent have students in partner schools achieved higher outcomes in English language arts and math when compared to student results in a similarly matched in-district school and the state cohort of non-participating, similar schools?

Research Question #5: School2Home Influence on Changes in Policy and Practice

To what extent has there been a change in school and district policy and practice to close the Achievement Gap and the Digital Divide?

About School2Home

The 10 Core Components of School2Home are anchored in research and best practices for using technology effectively in low-performing schools. School2Home employs a comprehensive set of inter-related interventions to transform school culture in ways that support student outcomes on a wide range of measures. It is consistent with the Local Control Funding Formula (LCFF) reforms and priorities, enacted into law in 2013. Consistent with LCFF priorities, School2Home addresses academic attainment, school climate, and parent engagement.

Implementation

A dedicated School2Home team within CETF works with participating school districts and schools for 3-5 years, and sometimes longer, to implement and sustain each of the 10 Core Components. The School2Home team works with district and school leaders to identify schools that have attained an appropriate level of technology readiness and that are committed to a successful implementation. Formal Partnership Agreements delineate the roles, responsibilities, and financial commitments of CETF, district offices, and the partner schools. School2Home Program Managers work with participating principals to establish a School Leadership Team to set goals and develop a Work Plan to guide the implementation of School2Home.

Customization

School2Home has found that each district and each school bring a different context at the start of the implementation process. Care is taken to work with each school at a pace that fits their needs and capacities and that builds on work already underway in the area of instructional technology. An important implementation goal is to help each school leverage School2Home to improve student academic performance and other priorities set forth in the Local Control Accountability Plan (LCAP) of their district and the Single Plan for Student Achievement (SPSA) at their school. While this customization is essential, it can impact outcomes. Where possible, these differences are noted throughout the report.

School2Home 10 Core Components

- **School Leadership, Assessment, and Planning:** A School Leadership Team is formed to assess needs, analyze data, set goals, develop a work plan, and oversee implementation.
- **Technology Bundles for Students and Teachers:** All students receive a computing device to use in the classroom and at home following parent training. Teachers receive powerful devices.
- **Teacher Professional Learning:** Teachers receive professional learning about integrating technology into classroom instruction, homework assignments, and engagement of parents.
- **Coaching and Mentoring:** School personnel are designated as technology coaches and content champions to support teachers and embed professional learning.
- **Parent Engagement and Education:** Parents receive basic digital literacy training to use the device, ensure online safety, communicate with the school, and support their child's education.
- **Student Tech Expert Development:** Students are recruited and trained to help provide basic technical support to other students, teachers, and families.
- **Online Resources:** The website provides support for teachers to prepare lessons and assistance for parents to acquire digital skills and engage with schools and teachers.
- **Learning Academies:** Principals and teachers participate in workshops and online sessions as learning communities to share best practices and learn from one another.
- **Affordable Home Internet Access:** Parents receive information about affordable high-speed Internet service offers and the availability of public broadband access centers.
- **Evaluation:** A comprehensive annual evaluation process provides feedback to schools for accountability and input to program managers for continuous improvement to achieve goals.
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The 2017 – 2018 School2Home Partner Schools

As shown in Table 1, partner schools varied in total student enrollment, number of participating students, and the length of time they have been participating in School2Home. Because 2 of the schools were in the very early planning phases, outcome data were not collected nor reported for those schools. However, demographic and other baseline data from these 2 schools were collected for future assessments.

Characteristics of the Partner Schools

Partner schools included in the Evaluation are among the most disadvantaged schools in the state with the following characteristics:

- High percentages of low-income students (89%) and English learners (23%).
- Poor academic performance, with less than a third meeting academic targets established by their districts for English language arts (ELA) and only 1 school meeting district targets in math.
- Low student proficiency rates (met or exceeded state standard) on standardized tests compared to statewide proficiency averages for middle schools:
 - 18.4% proficient in math compared to state middle school average of 35.5%.
 - 33.4% proficient in ELA compared to state middle school average of 47.0%.

Academic results in math ranged from 6.4% proficient to 36.3% proficient, with a median of 19.3%. For ELA, the results ranged from 16.1% proficient to 58.2% proficient, with a median of 34.4%.

All partner schools are public and are located in high-poverty [urban] neighborhoods and communities where broadband adoption rates are below that of the state as a whole. Of the 20 schools included in the Evaluation, 2 are district-sponsored charter schools and 8 are magnet schools.

Table 1: School2Home Partner Schools in 2017 – 2018

School District	School	Grades	Total Number of Students	Number of Participating Students	Years in Program
Inglewood Unified School District	Crozier Middle School	7, 8	641	641	4
Los Angeles Unified School District	Robert Louis Stevenson Middle School	6, 7, 8	1,227	600	8
	John Muir Middle School	6, 7, 8	800	800	5
	James Madison Computer Science and Engineering Middle School Magnet	6, 7, 8	396	396	5
	Edwin Markham Middle School	6, 7, 8	800	110	2
	Mark Twain Middle School	6, 7, 8	700	100	2
	San Fernando Institute of Applied Media	6, 7, 8	409	409	5
	Joseph Le Conte Middle School	6, 7, 8	890	420	2
	Christopher Columbus Middle School	6, 7, 8	705	200	2
	San Fernando Middle School	6, 7, 8	811	273	2
	Orchard Academy 2C*	6, 7, 8	459	50	1
	Maywood Center for Enriched Studies	6, 7, 8	1,025	520	1
	LA Promise Charter Middle School	6, 7	179	148	1
	Monsignor Oscar Romero Charter Middle School*	6, 7, 8	334	100	1
Riverside Unified School District	Central Middle School	7, 8	643	643	8
	Chemawa Middle School	7, 8	883	883	6
	University Heights Middle School	7, 8	801	801	6
San Bernardino City Unified School District	Arrowview Middle School	6, 7, 8	1,111	1,111	2
	Curtis Middle School	7, 8	818	818	2
	Del Vallejo Middle School	6, 7, 8	562	562	2
	Golden Valley Middle School	6, 7, 8	843	843	2
	Serrano Middle School	7, 8	839	839	2

*Schools in planning stages; not included in data analysis.

The Alumni Schools

During the 2017 – 2018 school year, CETF also provided transitional closeout funding and limited support to 13 schools primarily located in Northern California that had been active participants in prior years. These 13 “Alumni Schools” continued to participate in the School2Home Learning Academy Core Component but did not receive on-site technical or financial support. Outcome results for these schools are not reported. However, the Independent Evaluator interviewed the principals at these schools to help assess the extent to which these schools were continuing to sustain and implement the School2Home 10 Core Components.

Data Sources and Methods

The following data sources and methods informed the School2Home Evaluation. All primary data (surveys and interviews) were collected between May and October 2018.

Existing Document Review

- *Management Documents.* These include the School2Home Frameworks, Work Plans, Partnership Agreements, and Implementation Status Reports for each school. Results from the document review were compiled into an interim report, which was used to assess implementation progress and challenges as well as insights on the extent of changes at the schools.
- *Local Control and Accountability Plans (LCAPs).* The LCAPs for the 4 School2Home Districts were downloaded from the California Department of Education website. The LCAPs serve as a strategic plan for the district, setting forth goals, strategies, and funding. Information gleaned from these reports was used to assess the extent to which the partner schools were meeting goals established by their districts, as well as whether districts were including components of School2Home as strategies to achieve their goals.

Interviews

- *On-Site Interviews.* The Independent Evaluator along with a School2Home manager conducted on-site interviews with the principal (or designee) and, where possible, the School Leadership Team, using established protocols. Interviews were summarized in an Interim Report, which offered insights into implementation successes, challenges and satisfaction levels with School2Home services and outcomes.
- *Phone Interviews.* Phone interviews were conducted with principals at 11 Alumni schools, using established protocols. These interview results were summarized and used to help establish the extent to which the Core Components were sustained after they were no longer fully supported by CETF.

Online Surveys

- *Teacher Surveys.* School2Home collected 338 valid teacher surveys with questions related to implementation of the 10 Core Components and the integration of technology in the classroom and parent engagement. The 338 surveys represent 66% of participating teachers.
- *Parent Surveys.* School2Home collected 1,941 valid parent surveys with questions related to their home access to broadband and devices, support of their child's learning through technology, online access to information about their child's progress, and their involvement and communication with the school. Parents had the option of taking the survey in English or Spanish. The 1,941 surveys represent 20% of participating parents (1 per child).
- *Student Surveys.* School2Home collected 7,218 valid student surveys with questions related to their use of technology for learning at school and at home. This represents 75% of the students participating in School2Home.

State and National Education Academic Indicators and Descriptive Statistics

- *Department of Education.* Datasets for 2016-2017 were downloaded in the summer of 2018 from the California Department of Education website. These datasets included all schools in California and associated data elements related to the California Assessment of Student Performance and Progress (CAASPP) for ELA, math, and English Learner Progress (ELP), plus associated demographic statistics, enrollments, student groups, and suspension rates.

In October 2018, a second set of files was downloaded from the California Department of Education. These files (2014-2015, 2015-2016, 2016-2017, and 2017-2018) included the same elements, with the exception of ELP and suspension data. The suspension datasets were also downloaded, as were the English Language Progress Indicator and the English Language Proficiency Assessments (ELPAC) results for California.

The demographic data were used to describe the School2Home Cohort of partner schools and as guides to selecting 2 separate comparison Cohorts: (1) A Statewide Comparison Group and (2) In-District Match Schools. The academic performance data were used to investigate correlations between the School2Home Cohort and similarly situated, non-participant schools.

Report Highlights

School2Home typically takes several years to become fully embedded in the school culture. Analyses of the “stages of implementation” found that the partner schools that had been participating longer made the most significant progress toward fidelity in implementing all 10 Core Components of School2Home. This is due, in part, to resource shortages in schools in the early years of School2Home, especially for devices, and also to the time it takes to revise school policies, such as those that preclude students from taking their devices home. Measuring implementation could be improved with the updating of implementation rubrics, which would help School2Home and the partner schools more clearly understand the indicators of success and measure their progress toward defined benchmarks for each component.

The partner schools that carefully aligned School2Home to their overall learning goals were more successful at effectively integrating technology in and out of the classroom. Key success stories gleaned from the principals focused on specific outcomes such as “structured reading and evidence-based reasoning,” and “reclassification of English Learners.” The schools that aligned their technology use to their school goals were typically those that had participated in School2Home for several years and thus were able to build on the School2Home platform.

The most frequently cited challenges identified by the school leaders related to implementing the Parent Engagement and Education Component. Other identified issues included device management and selecting effective classroom strategies that directly resulted in student academic gains.

Families participating in School2Home increased their use of technology at home. Fifteen percent (15%) of the parent survey respondents reported that after participating in School2Home they acquired a broadband connection in their homes. Moreover, parents reported using the Internet to access information regarding jobs and social services to improve their own lives as well as the lives of their families.

A majority of participating parents frequently accessed the school portal for information about their child's learning (attendance, grades, assignments, etc.) and to communicate with their child's teachers and school staff. Schools and districts are heavily investing in Learning Management Systems with parent portals. Unfortunately, many parents lack the tools and skills they need to access this critical information. The School2Home parent workshops address this problem by training and supporting parents to use these tools, thereby maximizing the investment the districts are making to provide real-time information to parents.

The school leaders value the leadership, guidance, and resources provided by School2Home. School leaders praised the School2Home staff for their support, especially for their help with the Teacher Professional Learning and the Parent Engagement and Education Core Components. School leaders were also complimentary of the high-quality convenings and for the opportunity to network with schools both in their district and throughout the state.

Teachers are generally employing technology in the classroom at the “substitution” and “augmentation” levels of the SAMR Model.² These levels are the beginning stages of effective classroom technology integration. Teachers at these levels need more opportunities to develop the skills required to reach the “modification” and “redefinition” levels, which are viewed as more effective. Teacher professional learning could be enhanced if School2Home provided a mapping of the typical trajectories of teachers in their journeys from novice to mastery in the area of instructional technology so that participating teachers could set goals and monitor their own progress along this continuum.

Students at the partner schools are using their technology in math and ELA at least 1-2 times per week, with nearly three-quarters of students reporting frequent use of their devices. Over two-thirds of teachers reported moderate to high confidence that such technology use contributed to improvements in student learning. Although the intensity of technology use remains at fairly low levels, around 70% of students did report frequent use of their devices for learning. This is important as many low-performing schools are only using devices for test preparation and testing.

The analysis of longitudinal academic results for each partner school and comparisons to matched schools found that the partner schools that had participated 4 years or more and that had reached a high level of fidelity, achieved greater academic gains in ELA and higher rates of English Reclassification. All of the schools – those in School2Home Cohort and those in the comparison groups – are performing well below California standards for math. Some specific comparisons are provided below. It should be noted that a majority of the partner schools were in their first or second year of School2Home; thus, these results should be viewed as baseline results on which to measure growth going forward. Also, the following comparisons report correlations not causation.

- A 3-year comparison between the School2Home Cohort and the Statewide Comparison Group revealed that, while the School2Home Cohort initially had lower ELA results, they made sufficient gains over the Statewide Cohort to achieve approximate equivalency by 2017-2018.
- Between 2014-2015 and 2017-2018, the majority of the School2Home Cohort demonstrated progress towards meeting the California State Standard for English Language Arts (ELA).
- During the same time period as above, the School2Home Cohort made significant gains in the percentage of English language learners who made progress toward reclassification as English Language proficient.
- A 3-year comparison between the School2Home Cohort and the Statewide Comparison Cohort indicated that, while both Cohorts made academic progress, the math performance at the partner schools started lower than the Statewide Comparison Cohort at baseline, and remained so throughout that time period.
- A 3-year comparison between the School2Home partner schools and their In-District Match School (similar demographics and academic performance) showed that the majority of the School2Home partner schools achieved greater ELA and math growth over the last 3 years than did their In-District Match School. By 2017-2018 all School2Home partner schools were outperforming the In-District Match Schools in ELA, but not in math.

² The Substitution, Augmentation, Modification, and Redefinition (SAMR) Model, developed by Ruben R. Puentedura, is an important framework presented to teachers during the School2Home Professional Learning opportunities.

The districts that are participating in School2Home have included many of the 10 Core Components in their LCAPs. For the partner schools to sustain School2Home, the 10 Core Components must be incorporated into local plans, strategies, and budgets. An analysis of the LCAPs of the participating districts found evidence that they are indeed including digital learning strategies, tools and professional support that are closely aligned to the approach of School2Home.

Schools that are no longer “officially” part of School2Home are continuing to fund many of the 10 Core Components through their budgets and other resource allocations. Interviews with “alumni” school principals indicated widespread support for the comprehensive nature of School2Home and, to the extent possible, they are working to maintain the key program components.

Stakeholders in School2Home support its continuation with local funds. Most student, teacher, and parent survey respondents and administrator interviewees voiced support for School2Home and wanted to see it continued, even while recognizing that it would require investments of local funds.

Recommendations

Low-performing schools serving families in poverty face many challenges. Integrating technology into the fabric of school culture is not an easy task for *any* school; it is especially difficult in low-performing schools serving high-need students. The integration process is complex and requires shifts in school infrastructure, pedagogy, roles and responsibilities, and school culture. Moreover, the school leaders responsible for this culture change management also are fulfilling many other roles – logistical, budgetary, and instructional—to establish the conditions that support teaching, learning, and improved student outcomes. The School2Home 10 Core Components provide a valued, comprehensive framework to help low-performing schools integrate technology explicitly aimed at improving student outcomes.

Evidence analyzed by the Independent Evaluator indicates that all the partner schools are making progress in implementing the School2Home 10 Core Components. However, the process takes time. While School2Home staff attempt to launch as many of the components as possible, the pacing and timing must align with the resources and circumstances of each school.

Based on the findings of the 2017-2018 Evaluation, the Independent Evaluator offers the following recommendations for CETF, partner schools, and districts to consider as they work together to achieve higher student academic outcomes and increase home access to technology for families that remain on the wrong side of the Digital Divide. These 5 recommendations, many of which are underway, include:

1. ***Update and refine School2Home implementation rubrics (based on current research) to ensure fidelity to the 10 Core Components and facilitate data-informed improvement.*** The rubrics should provide specific benchmarks by which to measure growth and progress for each of the 10 Core Components. And, the rubrics should go beyond “time on task” and speak to the quality of the activities and the degree to which targeted audiences participated and found value. Implementation data can help School Leadership Teams engage in a process of reflection and continuous improvement. Program fidelity is crucial to the ultimate success of School2Home.
2. ***Map the learning trajectories of teachers as they move from digital novice to digital mastery so teachers can benchmark their growth.*** The School2Home Professional Learning Core Component is focused on the continuous growth and development of teacher proficiency in digital teaching,

learning, and parent engagement. A model depicting the stages of this development could help teachers at the partner schools, whose range of experience and expertise vary considerably, to set goals and monitor their growth. The model would also be useful to the Instructional Technology Coaches as they work to personalize their coaching to meet the individual needs of the teachers in their school.

3. ***Increase resources dedicated to implementing the Parent Engagement and Education Component to reap the benefits that engaged parents can provide.*** Among technology integration models and programs, School2Home is unique with its strong emphasis on parent engagement and home access to technology, a capacity that is particularly underdeveloped in low-performing schools located in high-poverty neighborhoods. Even with the support of School2Home, many school leaders stated that they remain challenged in successfully engaging parents in their child's education.

Both the partner schools and School2Home should start early in the school year and dedicate additional resources to strengthen and build on the foundation that the School2Home Parent Engagement and Education Core Component provides. Additional capacity building for school staff on culturally appropriate parent engagement would augment these efforts. Given the strong emphasis on family engagement in both state and federal education policy, districts should be encouraged to leverage funding for meaningful parent engagement strategies.

4. ***Improve the current academic growth trajectories at the partner schools by continuing to assist them in ensuring they identify and implement high impact digital learning strategies in math, ELA, and English language acquisition.*** School2Home provides an essential technology integration foundation for low-performing schools. However, School2Home must also serve as a platform on which to build more specific technology-enabled learning, especially in math. Implementing this recommendation would include:

- Compiling and disseminating emerging research, evidence and practices in digital learning in math, ELA, and English learner acquisition.
- Forming and supporting subject-matter learning communities across the School2Home Cohort of partner schools, possibly as a component of the School2Home Learning Academies.
- Guiding tactical planning, implementation, and documentation to support data-informed continuous improvement toward reaching the targeted academic outcomes.
- Sharing success stories among the partner schools as well as with district and state education leaders so that lessons learned can be repurposed throughout California.
- Adding a "math" specialist to the School2Home Program Management Team.

5. ***Develop partnerships with other education non-profit organizations, industry, and philanthropy as well as the State of California to advance policies and practices that will extend the breadth and depth of School2Home.*** CETF and the partner schools are diligently working to build the capacity of low-performing schools in leveraging the benefits of technology to improve life chances for students and families. However, this is a monumental task that requires statewide support from all sectors of the economy. CETF should seek to increase statewide awareness of School2Home and its accomplishments and encourage others to contribute resources and change policies to help these schools to succeed in preparing students who are ready for college and careers.