issue brief

February 2014

THE LINKS BETWEEN PROGRAM PARTICIPATION AND STUDENTS' OUTCOMES: THE REDWOOD CITY COMMUNITY SCHOOLS PROJECT

Manuelito Biag & Sebastian Castrechini

Background

Reforming public schools continues to be an important strategy for mitigating the adverse effects of social and economic disadvantages on students' academic success and positive development (Henig & Reville, 2011). Social scientists and practitioners alike view whole-child approaches, aimed at ameliorating disadvantages through direct and preventive measures (e.g., health services), as essential in improving students' ability to learn and do well in school (Ladd, Noguera, Payzant, Barton, Bond, et al., 2008). In this context, community schools are drawing increased public attention as a set of expanded learning opportunity models, which have in common a focus on partnerships that seek to align school and community resources to improve student and family outcomes (Dryfoos, 1994; Dryfoos & Maguire, 2002).

The vision of Redwood City community schools is to integrate academic, health, and social services; youth and community development; and community engagement. Community partners contribute resources to improve student and adult learning, strengthen families, and promote healthy communities. By coordinating or centralizing all of these services within the school setting, Redwood City community schools are designed to ease access to supports (e.g., mental health) and facilitate communication and collaboration among adults to better address the varied needs of children, youth, and families (Coalition for Community Schools, 2009; Dryfoos & Maguire, 2002; Dryfoos & Quinn, 2005).

The Present Study

Located in Northern California, Redwood City School District (RCSD) consists of 16 schools serving approximately 9,200 ethnically diverse students in Kindergarten through eighth grade. A majority of students identify as Latino (73%), nearly half are classified as English Learners (45%), and about 65% qualify for subsidized school meals. There are six full-service community schools in RCSD: Fair Oaks (K-5), Garfield (K-8), Hawes (K-5), Hoover (K-8), Kennedy (6-8), and Taft (K-8). These schools provide students and families with a diverse array of services and supports that are centralized within the school setting and coordinated by a district employee; these services include extended learning activities and family assistance programs. Redwood City's community schools are premised on the idea that well-developed inputs (e.g., funding) and well-developed strategies (e.g., professional development) can bring about positive changes in students' short-term outcomes (e.g., attendance). In turn, these outcomes foster the conditions necessary for academic success and productive futures. In recognition of this, Redwood City Community Schools developed and designed a logic model based on the work of the Coalition for Community Schools (Exhibit 1).

Exhibit 1: Redwood City Community Schools Logic Model and Data Indicators

Inputs	Strategies	Deliverables	Short-term Outcomes	Long-term Outcomes
Community School	Family	Supported and	Students Receive	Students
Coordinator	Engagement	Connected	Supports	Succeed
	-Education	Families	According to Their	Academically
Family	-Leadership		Needs	Indicator: CST
Engagement	-Volunteerism	Comprehensive	Indicator:	and CEDLT
Specialist		Learning Supports	Demographic	scores
	Extended		information linked	
Funding/Resources	Learning	Integrated Service	to participation	Students and
	Opportunities	Delivery (physical,		Families are
Relevant Partners		emotional, social)	Children are	Healthier:
	Mental Health/	Indicator:	Ready to Learn	 Socially
Leadership	Social Services	Participation in	Indicator: school	 Physically
	Support	multiple services	attendance	 Emotionally
Collaboration				-
Structure	Social/Emotional	High Quality	Students are	Schools are
	Learning	Programs	Actively Involved	Supportive of
		Indicator: Youth	in Learning and	Youth and
	Professional	Program Quality	their Community	Families
	Development	Assessment	Indicator: student	
		(Y-PQA)	survey items	Communities are
	School /Partners			Desirable Places
	Collaborative	Partner Integration	Families are	to Live
		into the School Day	Connected to	
			Schools	

*Note: Key strategies are in bold.

Since 2006, RCSD has partnered with the John W. Gardner Center for Youth and Their Communities (Gardner Center) at Stanford University's Graduate School of Education to examine annual patterns of program participation across the community schools' key strategy areas of extended learning, family engagement, and support services (Exhibit 2). This year's analysis was guided by three research questions that were co-developed with the district's Director of the Community Schools:

- 1. What are the key demographic characteristics of students who do not take part in any community school program or support? How do non-participants compare with participants?
- 2. What are the key demographic characteristics of students who receive multiple types of supports? What types of services do they access?
- **3.** How does participation in single and multiple strategy areas influence students' short-and long-term outcomes?

Exhibit 2: RCSD Community School Strategy Areas and Program Categories

STRATEGY AREA	PROGRAM CATEGORY	EXAMPLE PROGRAMS	
	Parent Leadership	 School Site Council English Learner Advisory Committee (ELAC) meetings 	
	Parent Education	ESL ClassesComputer Classes	
Family Engagement	Parent Volunteer	Volunteer ActivitiesOutreach	
	Parent Events	FundraisersSchool Socials	
	School-Home Communication	Coffee with the PrincipalBack-to-School Nights	
	Afterschool	Afterschool ProgramsExtended Day-Americorps	
Extended Learning	Youth Leadership	Conflict ManagersLegal Education Program	
	Summer/Intercession Programs	Summer BridgeFall/Spring Intercession	
Support	Counseling	Individual CounselingCase Management	
	Family Assistance	Uniform HelpHoliday Gift Cards	

By linking students' academic records (e.g., test scores), community school program participation records, and survey responses, our analysis yielded several key findings:

- Programs reached a majority of students enrolled in the six community schools, particularly the population of students who were lower-achieving and came from lowereducated and economically disadvantaged families.
- Students whose families were consistently involved over a number of years in family engagement opportunities had a higher attendance rate than those who were less involved.
- Students whose families regularly took part in family engagement opportunities and another key strategy area (i.e., either extended learning or supports) demonstrated higher attendance rates than many of their counterparts.
- Middle school students who engaged in extended learning programs and accessed support services demonstrated a gradual increase in their perceptions of care at school.

 Compared to their peers who were less involved, English Learner students whose families regularly took part in family engagement over several years showed greater gains in their attendance and English language proficiency.

In what follows, we first describe the program participation patterns across and within the six community schools in the three key strategy areas of family engagement, extended learning, and support. Then, we discuss in turn the analytic strategies and key findings for each of the research questions above. Finally, we highlight the potential practice and policy implications raised by the research findings.

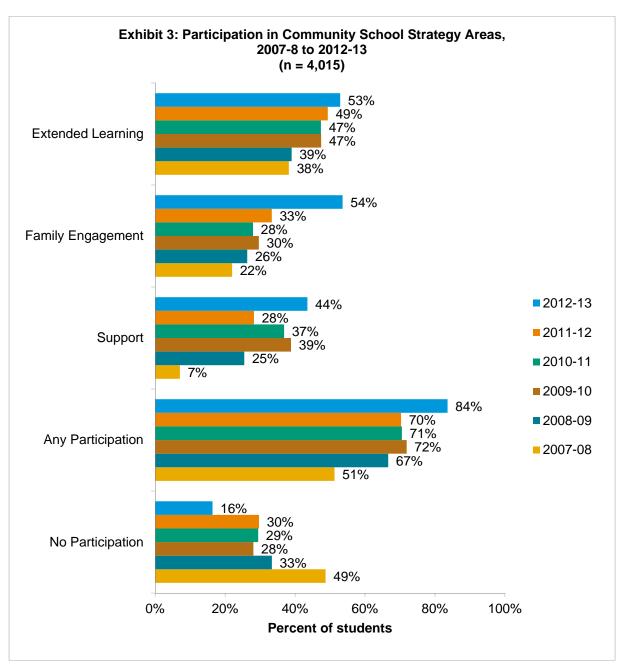
Data & Methods

We employed descriptive statistical analyses and regression modeling drawing on student-level information from the Youth Data Archive—a Gardner Center initiative that integrates individual-level administrative data from various sources and agencies (McLaughlin & London, 2013). Using student-level identifiers (e.g., ID numbers), we linked data from students':

- District administrative records from Redwood City School District (e.g., grades, test scores, attendance, demographic information);
- Program participation records collected at each community school; and
- Survey data on motivation and their experiences both in school and in after school programs.

Program Participation Across & Within Community Schools

We observed that 84% of the 4,015 students enrolled in Redwood City's community schools took part in some type of program during the 2012-13 academic year; this was a 14 percentage point increase in the share of participants involved from the previous year (Exhibit 3). Participation rates in family engagement opportunities demonstrated the biggest increase, going up from 33% last year to 54% this year. Similarly, there was a 16 percentage point increase in participants' use of support services (e.g., drop-in counseling), rising from 28% last year to 44% this year. The share of students taking part in extended learning activities (e.g., summer sessions) also continued on an upward trend, reaching more than half of students in the 2012-13 academic year (53%).



In addition, we conducted a grade-level comparison of participation rates across all community schools, over time, for each strategy area (Exhibit 4). We discovered that Kindergarten students had the lowest participation rates in extended learning opportunities among the community schools. We also found that grade 8 students and their families had the lowest participation rates in the family engagement strategy area, and a larger proportion of students in grades 6 and 7 utilized support services relative to other grades. While students in the 5th grade had the highest rates of participation in any community school program, Kindergarten students had the lowest rates.

Exhibit 4. Participation in Community School Strategy Areas by Grade Level, 2012-13

GRADE	EXTENDED LEARNING	FAMILY ENGAGEMENT	SUPPORT	ANY PARTICIPATION	NO PARTICIPATION	NUMBER OF STUDENTS
K	18%	49%	39%	74%	26%	472
1st	37%	56%	39%	81%	19%	436
2nd	37%	63%	40%	85%	15%	443
3rd	55%	60%	38%	85%	15%	443
4th	51%	69%	44%	89%	11%	418
5th	57%	71%	46%	91%	9%	427
6th	42%	44%	50%	83%	17%	416
7th	76%	42%	49%	90%	10%	472
8th	57%	32%	45%	76%	24%	488
OVERALL	48%	54%	43%	84%	16%	4,015

Research Question #1 - What are the key demographic characteristics of students who do not take part in any community school program or support? How do non-participants compare with participants?

In all, programs at RCSD's six community schools predominantly served a vulnerable population of lower-achieving students from economically disadvantaged, ethnically and linguistically diverse backgrounds (Exhibit 5). While there were few gender differences between the participant and non-participant groups, we found that a majority of those engaged in community school programs identified themselves as Latino (92%) and were classified as English learners (63%). With regard to academic performance, program participants were lower-performing, where a smaller share of them scored proficient or above on the state's standardized exams in Mathematics (54% vs. 57%) and English Language Arts (39% vs. 49%), when compared to their non-participating counterparts.

Exhibit 5: Demographic Profiles of Community Schools Non-Participants vs. Participants by Strategy Area

STUDENT CHARACTERISTICS	NON- PARTICIPANTS	PARTICIPANTS	EXTENDED LEARNING	FAMILY ENGAGEMENT	SUPPORT	
Gender						
Male	51%	52%	51%	51%	53%	
Female	49%	48%	49%	49%	47%	
Race/ethnicity						
Latino	84%	92%	91%	94%	93%	
White	6%	4%	4%	3%	3%	
African American	3%	1%	1%	0%	1%	
Parental education						
Parent College	5%	4%	5%	3%	3%	
Parent HS	24%	25%	27%	24%	23%	
Parent no HS	26%	40%	41%	44%	43%	
Academic characteristics						
Math Proficient 2011-12	57%	54%	53%	59%	50%	
ELA Proficient 2011-12	49%	39%	40%	39%	35%	
Special Education	12%	12%	11%	11%	13%	
English Learner	58%	63%	59%	66%	65%	
GATE	1%	2%	3%	3%	2%	
Free & Reduced Price Lunch	83%	95%	94%	97%	96%	
NUMBER OF STUDENTS	659	3356	2124	2152	1740	

Research Question #2 - What are the demographic characteristics of students who receive multiple types of supports? What types of services do they access?

Across the community schools, students often participated in more than one strategy area (Exhibit 6). For example, 16% of students enrolled in community schools accessed programming in all three key strategy areas. Overall, participants accessing support services were more likely to engage in another strategy area, with 8% of students accessing only support services. Among students participating in two strategy areas, extended learning and family engagement was the most frequently accessed combination of programs (15%), followed by family engagement and support (10%), and extended learning and support (9%).

Exhibit 6: Program Participation Rates in Single Strategy Areas and Combinations of Strategy Areas in 2012-13, by School

	FAIR OAKS	GARFIELD	HOOVER	KENNEDY	TAFT	HAWES	OVERALL
Extended Learning Only	15%	8%	1%	26%	8%	22%	13%
Family Engagement Only	11%	8%	30%	3%	10%	7%	12%
Support Only	10%	12%	1%	10%	6%	13%	8%
Extended Learning & Family Engagement	12%	13%	20%	10%	25%	6%	15%
Extended Learning & Support	10%	15%	1%	17%	5%	7%	9%
Family Engagement & Support	7%	12%	22%	2%	7%	7%	10%
All Three Strategy Areas	20%	17%	21%	8%	25%	5%	16%
No Participation	16%	13%	6%	24%	13%	33%	16%
NUMBER OF STUDENTS	427	717	937	880	616	438	4015

To further explore variations in participation patterns, we compared the demographic characteristics of student participants who engaged in a single strategy area versus a combination of strategy areas (Exhibit 7). We found that slightly more males (54%) than females (46%) accessed a combination of support services and family engagement opportunities at their local community school. Among this group, a majority were Latino (95%) and English learners (72%); also, nearly half of them had parents with less than a high school education (45%), and almost all qualified for subsidized school meals (99%). Additionally, compared to those who accessed other combinations of services, those who engaged in support services and extended learning programs had the lowest proficiency rates on the California Standardized Tests (CSTs) in Mathematics (41%) and English Language Arts (33%).

Exhibit 7: Demographic Profiles of Community School Participants in Single Strategy Areas and Combinations of Strategy Areas in 2012-13

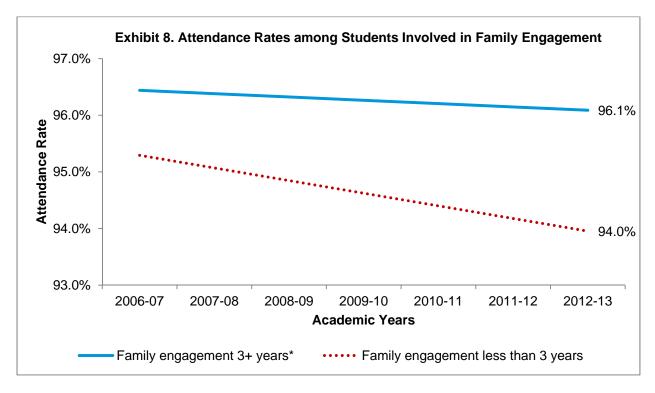
STUDENT CHARACTERISTICS	EXTENDED LEARNING ONLY	EXTENDED LEARNING & FAMILY ENGAGEMENT	EXTENDED LEARNING & SUPPORT	FAMILY ENGAGEMENT ONLY	FAMILY ENGAGEMENT & SUPPORT	SUPPORT	ALL THREE	NO PARTICIPATION
Gender								
Male	51%	49%	53%	51%	54%	57%	51%	51%
Female	49%	51%	47%	49%	46%	43%	49%	49%
Race/ethnicity								
Latino	85%	92%	86%	93%	95%	90%	96%	84%
White	7%	4%	6%	2%	2%	3%	2%	6%
African American	1%	0%	3%	0%	0%	2%	1%	3%
Parental education								
Parent College	8%	6%	5%	2%	1%	2%	3%	5%
Parent HS	31%	26%	26%	23%	19%	21%	25%	24%
Parent no HS	30%	44%	37%	38%	45%	33%	50%	26%
Academic characteristics								
Math Proficient 2011-12	49%	63%	41%	65%	58%	45%	54%	57%
ELA Proficient 2011-12	45%	45%	33%	38%	36%	36%	35%	49%
Special Education	9%	12%	12%	9%	12%	20%	12%	12%
English Learner	53%	58%	58%	73%	72%	68%	64%	58%
GATE	4%	5%	1%	2%	1%	1%	2%	1%
Free & Reduced Lunch	86%	95%	93%	97%	99%	90%	99%	83%
NUMBER OF STUDENTS	513	599	365	496	410	326	647	659

Research Question #3: How does participation in single or multiple strategy areas influence students' short- and long-term outcomes?

Using statistical models that accounted for individual and school level factors, we explored whether consistent participation (in this case, three or more years) in single or multiple strategy areas was associated with students' attendance, perceptions of care at school (during the middle grades), and scores on the California Standardized Tests in Mathematics and English Language Arts. We also tested among English learners whether engagement in one or several strategy areas was linked to English language proficiency, as measured by the California English Language Development Test (CELDT). It is important to note that results from these statistical models can only indicate associations, but cannot, by themselves, confirm direct causal links between program participation and students' outcomes.

Attendance

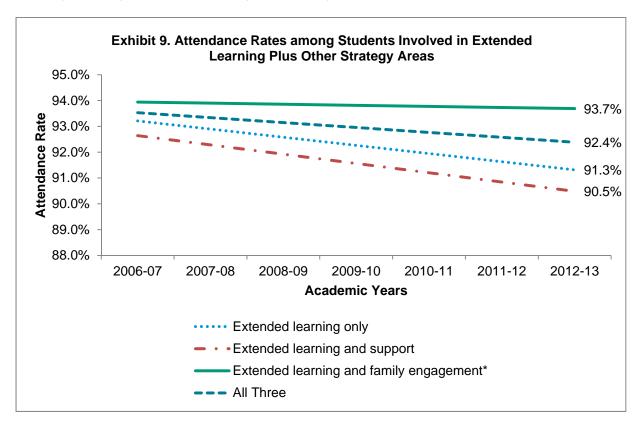
Our analysis indicated that students whose families were consistently involved in family engagement activities for three or more years had a statistically significantly higher attendance rate than those who were less involved. First, we compared the outcomes of those only involved in family engagement opportunities for three or more years, with those engaged for less than three years (Exhibit 8). Participants consistently taking part in family engagement had roughly a 0.1 percentage point annual advantage in their attendance rates, resulting in a statistically significant 2.1 percentage point difference in the 2012-13 academic year (as noted by the asterisk in Exhibit 8); this adds up to almost four extra days of school attendance over a 180-day school year (.021 x 180 days = 3.78 days). ¹



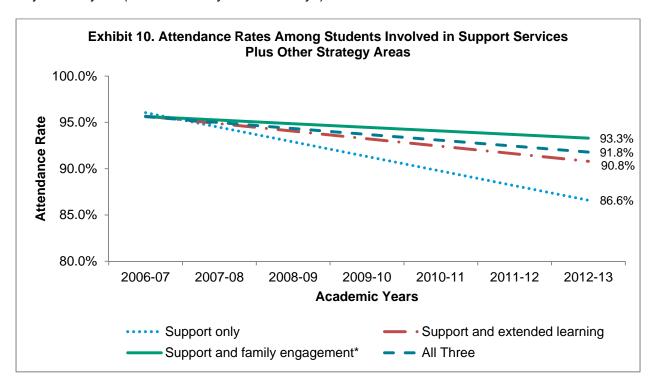
¹ Students' attendance rates = number of days attended school / number of days enrolled.

^{*} Note: Asterisk denotes a statistically significant difference.

Next, in the extended learning strategy area, we compared students who only took part in extended learning activities (e.g., intercession programs) with those who engaged in extended learning and whose families regularly participated in family engagement opportunities (e.g., parent education classes). Those participating in both extended learning and family engagement had a statistically significantly higher attendance rate than many of their counterparts (Exhibit 9). Relative to those who were only involved in extended learning, the growth in students' attendance rates was approximately 0.7 percentage points higher per year for those participants whose families also took part in family engagement activities for three or more years. The difference in growth, over time, resulted in a 2.4 percentage point gap by the 2012-13 academic year, the equivalent of about four extra days of school attendance over a 180-day school year (.024 x 180 days = 4.32 days).



Finally, in the support strategy area, we compared the attendance rates of those consistently accessing only support services with those engaged with support services plus one other strategy area. Relative to those only engaged in supports (e.g., family assistance programs), students who accessed a combination of support services and family engagement opportunities had a statistically significantly higher attendance rate than their peers (Exhibit 10). This difference resulted in a 6.7 percentage point difference between these two groups in the most recent academic year, which roughly equates to 12 extra days of school attendance over a 180-day school year (.067 x 180 days = 12.06 days).

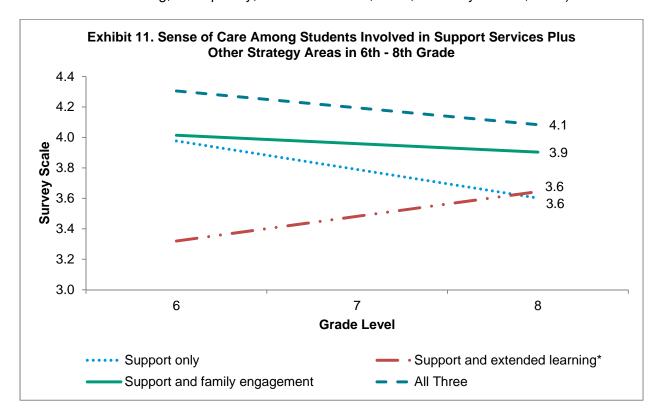


Students' Sense of Care at School in the Middle Grades

Our analysis also showed that participants engaged in more than one strategy area—in this case supports and extended learning—experienced a positive change in their perceptions of care at school during the middle grades (Exhibit 11). Examining students' viewpoints about and experiences in school has important implications, both for practice and policy. A review of the academic literature shows that students who report a stronger sense of care and belonging in school are more likely to show interest in school, have less anxiety, and perceive themselves to be more competent (Osterman, 2000). The middle school survey, which is administered annually to RCSD youth in grades 6-8, taps students' viewpoints about various aspects of the school and classroom environment, including students' perceptions of staff practices and their personal sense of confidence in their motivation to learn. The survey uses a six-point measure, where 1 equals *very untrue* and 6 equals *very true*.

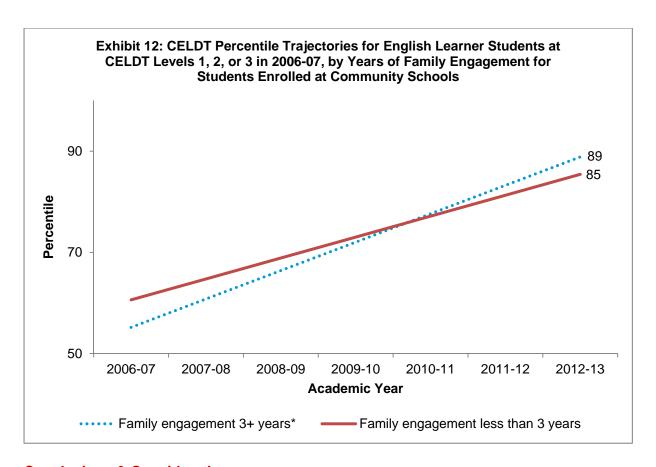
We found that students who accessed support services and took part in extended learning programs had lower initial perceptions of the school climate in the 6th grade, relative to their peers who accessed only support services or who participated in other program combinations. Although most students' sense of care at school declined slightly as they matriculated from grades 6 to grade 8, those who accessed a combination of support services and extended learning opportunities increased by the time they reached the 8th grade. In fact, when compared

to students who only engaged in support services, the difference between the two groups is statistically significant and positive (as noted by the asterisk in Exhibit 11). While modest, this finding holds promise because past studies have demonstrated positive links between students' perceptions of the school environment and their academic, social, and health behaviors (e.g., lower rates of smoking, delinquency; Battistich & Hom, 1997; McNeely & Falci, 2004).



English Language Proficiency among English Learners

Compared to English learners involved in family engagement opportunities for less than three years, those who scored at Level 1 (Beginning), Level 2 (Early Intermediate), or Level 3 (Intermediate) on the CELDT in the 2006-7 academic year and who had families consistently involved in family engagement activities for three or more of the next six years, demonstrated a higher proficiency growth rate in their listening, speaking, reading, and writing skills in English (Exhibit 12). This higher growth rate resulted in a statistically significant four-percentile point difference on the CELDT between these two groups.



Conclusions & Considerations

With their wide array of services and supports, community schools are designed to provide a safe and supportive learning environment for students and families alike. In response to the request of partners in the Redwood City School District, the present study examines students' participation in the district's community school programs and whether their participation is linked to important outcomes (e.g., attendance). Our analyses reveal that a majority of students enrolled in RCSD's six community schools are participating in at least one type of program (e.g., afterschool enrichment activities). We found that community schools were successful in reaching students who were lower-achieving and who came from diverse, less educated, and economically disadvantaged families. We also observed that family engagement appears to be an important strategy in promoting students' educational prospects. Our analyses show that students whose families were consistently involved in family engagement opportunities (e.g., parent education classes, volunteer opportunities) had a higher attendance rate than those who were less involved. Similarly, students participating in multiple strategy areas—namely family engagement plus another area—also attended school more regularly than their counterparts involved only in one strategy area. Moreover, we found that among English Learner students, those whose families were involved continuously in family engagement programs demonstrated greater gains in their attendance and English proficiency than their less engaged peers.

Present findings raise important questions about family engagement practices that are applicable beyond Redwood City. We know from the literature that family engagement is a highly complex and multidimensional concept that encompasses a range approaches and activities involving numerous stakeholders (e.g., teachers, administrators; Hoover-Dempsey et al., 2005). We also understand that family engagement can mean different things to different

people (Westrich & Strobel, 2013). While teachers may view family engagement as primarily school-based (e.g., attending PTA meetings at school), students and families—particularly those from low-income, ethnic and linguistic minority backgrounds—have a more expanded notion of family engagement and see home-based efforts that support schooling (e.g., enforcing rules around homework completion) as equally important. Although we observed that family engagement is positively associated with students' attendance and English language proficiency, more research is needed to identify exactly which family engagement practices and activities and school outreach strategies are most beneficial to students and families (Van Voorhis, Maier, Epstein, Lloyd, & Leung, 2013).

Leaders in Redwood City's community schools and at the district level have a unique opportunity to help address this knowledge gap. With years of research evidence collected on family engagement within their local context, they have the capacity to refine and refocus their beliefs and practices in a more nuanced way so as to more directly respond to the needs and circumstances of students and families. School principals and coordinators can benefit from closely examining the array of supports, services, and engagement activities they offer, and come to a shared understanding of how these opportunities fit together to help achieve certain goals and outcomes. Further, engaging in dialogue with families to learn more about their home-based strategies could build additional bridges and improved outcomes. Doing so will afford community school leaders opportunities to learn about the types of practices that directly relate to students' learning and development. They may also better understand the information and supports parents need to carry out activities at home that help build their children's skills and ensure their success in school.

Leaders in RCSD's community schools are also in a unique position to engage in additional research that improves understanding of how family engagement can be better integrated with other community school strategy areas. For example, more research is needed to understand the role of families during the afterschool hours, and whether engagement in afterschool programs yield the same benefits to children as they do during the regular school day. There are several promising avenues for inquiry that can be explored to help answer key questions such as: to what extent do afterschool programs present a gateway into the school for those parents who feel less connected to their children's school; how do afterschool providers partner with teachers and administrators to encourage more family involvement; and what unique engagement opportunities do afterschool programs afford that are not possible during the regular school day? Further in-depth qualitative studies that address these and other related questions are warranted to help deepen understanding of the mechanisms by which family engagement works to influence students' learning and participation in school (Van Voorhis et al., 2013).

In sum, the present analysis provides important information on the program participation patterns of students enrolled in Redwood City's six community schools. Results from this work helps inform policy and program development, both at the school and district levels. This research also highlights rich areas for research that can help advance the mission and reach of community schools. Moving forward, we hope to continue engaging with community school leadership in translating these and other study findings into concrete and actionable strategies.

References

- Battistich, V. & Hom, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. *American Journal of Public Health*, 87(12), 1997-2001.
- Coalition for Community Schools (2009). Community schools research brief 09. Washington, D.C. Retrieved from http://www.communityschools.org/assets/1/AssetManager/CCS%20Research%20Report2009.pdf
- Dryfoos, J. G. (1994). Full-service schools: A revolution in health and social services for children, youth, and families. Jossey-Bass.
- Dryfoos, J., & Maguire, S. (2002). *Inside full-service community schools*. Thousand Oaks, CA: Corwin Press Inc.
- Dryfoos, J., Quinn, G, & Barkin, C. (Eds.). (2005). *Community schools in action: Lessons learned from a decade of practice*. Oxford: Oxford University Press.
- Henig, J.R., & Reville, S.P. (2011). Why attention will return to non-school factors. *Education Week, 30*(32), 23-28.
- Hoover-Dempsey, K. et al. (2005). Why do parents become involved? Research findings and implications. *The Elementary School Journal*, *106*(2), 105-130.
- Ladd, Noguera, Payzant, Barton, Bond, et al. (2008). A broader, bolder approach to education. *The New York Times*, 74, 91. Retrieved from: http://www.boldapproach.org/20080610-ad-wp-final.pdf
- McLaughlin, M., & London, R. (2013). From data to action: A community approach to improving youth outcomes. Cambridge, MA: Harvard Education Press.
- McNeely, C. & Falci, C. (2004). School connectedness and the transition into and out of health-risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Health, 74*(7), 284-292.doi: 10.1111/j.1746-1561.2004.tb08285.x
- Osterman, K. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367. doi: 10.3102/00346543070003323
- Van Voorhis, F.L., Maier, M.F., Epstein, J.L., Lloyd, C.M., & Leung. (2013). The impact of family involvement on the education of children ages 3 to 8: A focus on literacy and math achievement outcomes and social-emotional skills. New York, NY: MDRC. Retrieved from http://www.mdrc.org/sites/default/files/The_Impact_of_Family_Involvement_FR.pdf
- Westrich, L. & Strobel, K. (2013). A study of family engagement in Redwood City community schools. Retrieved from http://gardnercenter.stanford.edu/resources/reports/FamilyEngagementIssueBrief2013

The authors gratefully acknowledge our partners at the Redwood City School District for contributing data to this project and providing valuable feedback and guidance throughout the analytic process.

John W. Gardner Center for Youth and Their Communities

Stanford Graduate School of Education 365 Lasuen Street, Third Floor Stanford, CA 94305-2068

650.723.3099 gardnercenter@stanford.edu www.gardnercenter.stanford.edu