

youth data archive issue brief

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PARTICIPATION AMONG SAN FRANCISCO UNIFIED SCHOOL DISTRICT STUDENTS IN PROGRAMS OFFERED BY THE DEPARTMENT OF CHILDREN, YOUTH, AND THEIR FAMILIES

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For the past year, the San Francisco Department of Children, Youth, and their Families (DCYF), San Francisco Unified School District (SFUSD), and the John W. Gardner Center for Youth and Their Communities at Stanford University (Gardner Center) have collaborated to examine SFUSD student participation in DCYF-funded programs. This analysis utilizes the Youth Data Archive, a Gardner Center initiative that links administrative data on individual youth across settings to collectively examine questions that agencies could not answer alone. The partnership will help DCYF understand which students its programs serve and better match its programs to students who need the most help. The following research questions guided the findings presented in this report:

- To what extent do SFUSD students participate in DCYF programs?
- What types of SFUSD students are more likely to participate in DCYF programs?
- What are the longitudinal patterns of participation in DCYF programs?
- To what extent do high school graduates and postsecondary students from SFUSD participate in DCYF programs?

The results from this analysis are descriptive in nature. Although the data show correlations between program participation and student characteristics or outcomes, these findings are not intended to say that program participation caused any specific student outcomes. The research finds:

- DCYF serves a significant share of the SFUSD student population.
- Participation in DCYF funded programs steadily increased over time.
- DCYF is more likely to serve students of color and students with lower levels of academic achievement.
- The frequency of participation in DCYF programs increased over time.
- A significant proportion of high school graduates and postsecondary students participated in DCYF programs.

Data & methods

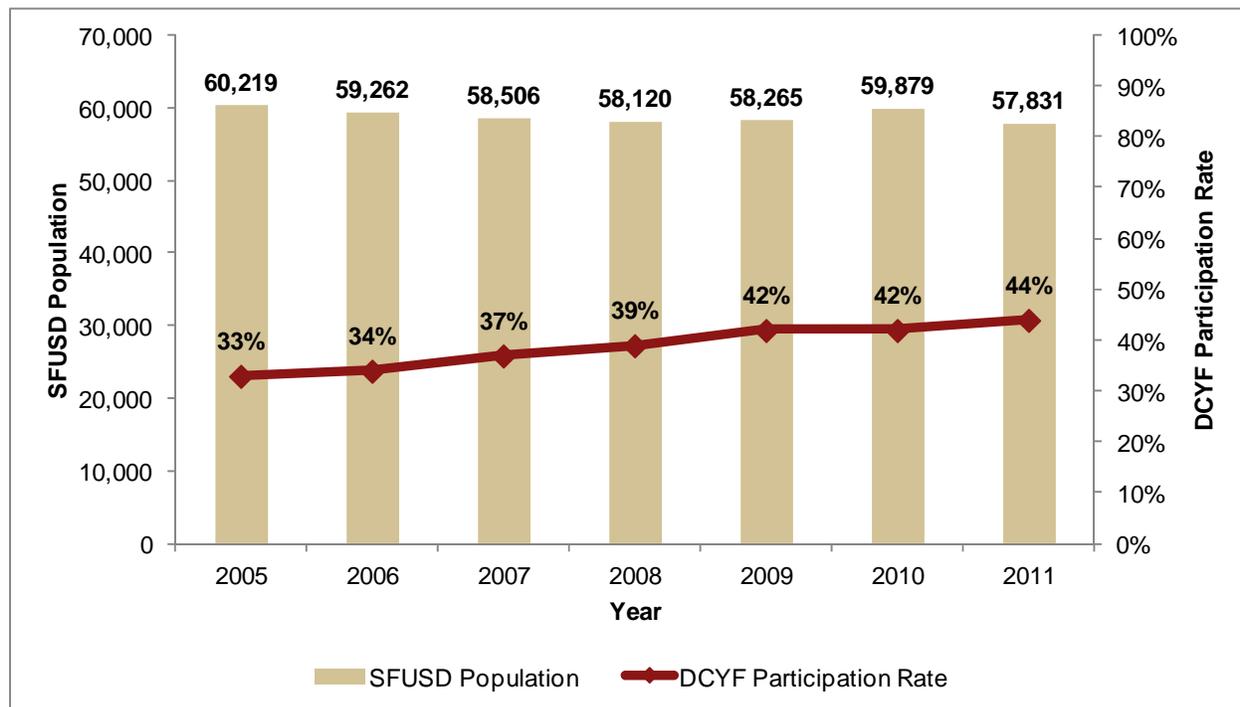
Since 2005, DCYF has compiled program participation data on its diverse portfolio of funded programs. DCYF's primary service areas include Health and Wellness (HW); Early Care and Education (ECE); Out of School Time (OST); Youth Leadership, Empowerment, and Development (YLEAD), which includes Specialized Teen and Youth Workforce Development programs, Family Support (FS), and Violence Prevention and Intervention (VPI). Using the Youth Data Archive, the Gardner Center linked program participation records to SFUSD administrative data on students based on student identifiers and demographic characteristics. This allowed the research team to combine SFUSD attendance, discipline, demographic, and achievement data to program participation records from DCYF. Program records include days attended, agency name, and program service area.

In addition to tracking whether or not a student attended a program, we also gauged the level of attendance. Using the total number of days attended in a given year, we created three levels of attendance that possess statistical and practical meaning. The lowest category of attendance captures students attending between 1 and 10 days in a given year. Ten days of attendance in a year is equivalent to an attendance rate of approximately once a month. Moreover, federally funded studies of youth development programs often use 10 days as the threshold for identifying active participants. The second attendance category represents students attending between 11 and 40 days. The upper boundary for this category coincides with the 75th percentile of attendance in our sample. In other words, three out of four students attended a program for less than 40 days. The final category represents students with the highest levels of program attendance ranging from 41 days up to approximately 300 days.

To what extent do SFUSD students participate in DCYF programs?

DCYF serves a significant portion of students enrolled in SFUSD. At least one third of SFUSD students in any given year participated in a DCYF-funded program for at least one day as shown in Exhibit 1. Moreover, participation rates increased during the study period. In 2011, 44% of SFUSD students participated in a DCYF program for at least one day, an increase of 11 percentage points from the participation rate of 33% in 2005. DCYF serves a significant proportion of secondary students. Among high school students, 41% participated in DCYF programs compared to 38% and 21% for middle and elementary school students respectively. DCYF also serves students in pre-K and students who have left high school, but participation for those students is not analyzed in this report because those students do not match to SFUSD records.

Exhibit 1. DCYF Participation Rates & SFUSD Population from 2005-2011



DCYF participation varies significantly by service area.¹ OST is the most popular service area consistently serving more than half of DCYF participants during the study period. The high level of participation among DCYF participants may stem from the nature of OST programs. Students may have an easier time accessing OST programs because some are located on school sites rather than other locations in the community, which is especially important for elementary students, whose families may be more likely to send them to afterschool programs than secondary students. HW programs have the second most active service area by engaging at least 20% of all SFUSD students participating in DCYF services in a given year. These programs may also benefit from their affiliation with school sites. VPI and YWD programs have lower levels of uptake as these programs may be more likely to target specific students.

The frequency of SFUSD student attendance in DCYF programs has increased over time. Exhibit 2 presents the distribution of participant attendance in 2011. More than a quarter of SFUSD students participating in DCYF programs (27% or approximately 6,918 students) attended 10 or fewer days. Twenty-six percent of SFUSD students participating in DCYF programs (or 6,535 students) attended a DCYF program between 11 and 40 days, and the remaining 47% (or 11,961 DCYF participants) attended more than 40 days. These results present an interesting shift from the attendance levels in 2005. In particular, the share of students participating 10 or fewer days decreased over time by 11 percentage points, indicating

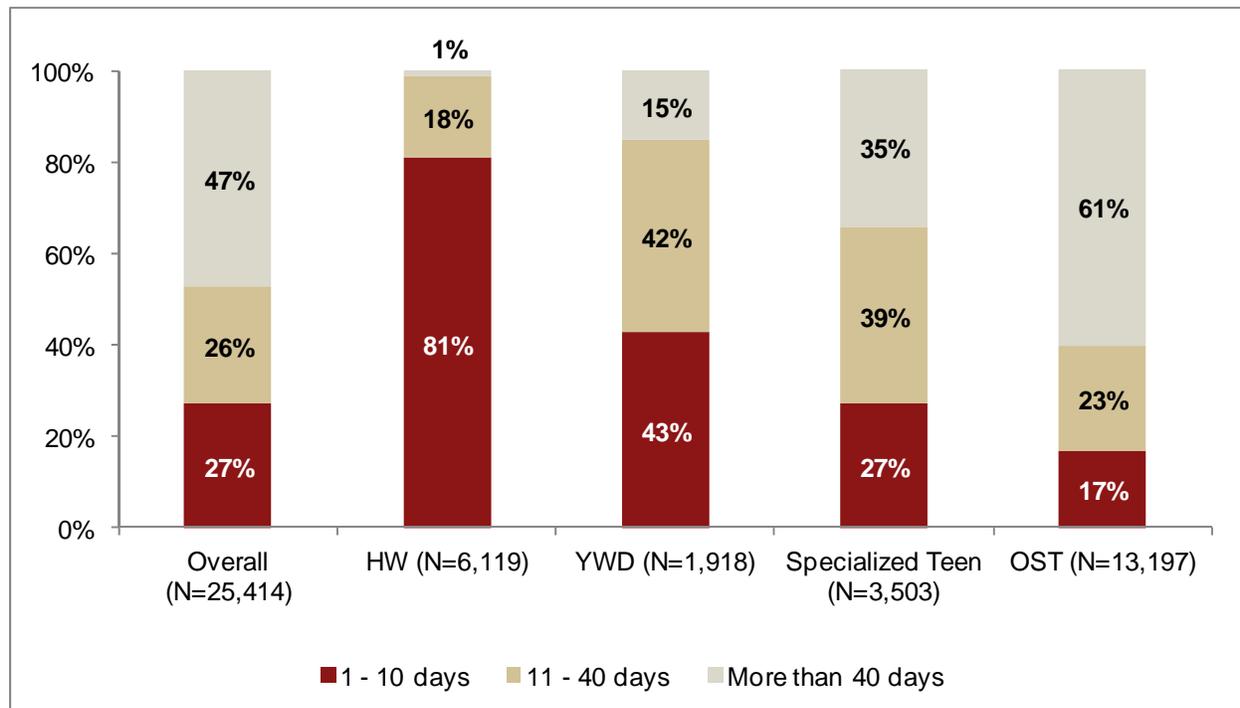
¹ DCYF collaborates with First 5 San Francisco and the Human Services Agency in the provision of ECE services. Because much of the attendance data are reported to First 5, they are not included in this brief. Therefore, we omitted results specific to ECE programs in analyses broken down by service area. However, ECE data are included in analyses that examine overall participation not broken down by program.

that a higher concentration of students participated 11 or more days. In other words, SFUSD students participating in DCYF-funded programs did so more frequently over time.

Also shown in Exhibit 2, participants in HW exhibited the lowest numbers of days attended. In 2011, 81% of students participating in HW did so at the lowest attendance level (1-10 days), whereas only 1% of students participated at the highest attendance level (more than 40 days). OST had the highest levels of attendance where 61% students in these programs attended for more than 40 days and 17% of students attended at the lowest levels. Differences in the manner of program design and age of participants may influence attendance levels. For example, the HW interventions are a result of health and safety needs of high school students whereas OST services are designed to provide academic, enrichment, and physical activities for students in Kindergarten to 8th grade on an ongoing basis throughout the school year. Despite differences in the magnitude of program attendance, all service areas experienced an increase in program attendance during the analysis period. However, Specialized Teen programming experienced a marked increase in attendance with a 26-percentage point increase in the share of participants attending at the maximum attendance level (from 9% in 2010 to 35% in 2011).

Finally, we found differences in SFUSD student participation in DCYF programs by school. Participation rates of students accessing DCYF programming range from a low of 6% to a high of 100%. Schools with the highest rates of students participating in DCYF programming tended to be high schools with non-traditional or alternative instructional programs such as the Life Learning Academy, Ida B. Wells High School, and San Francisco International High School.

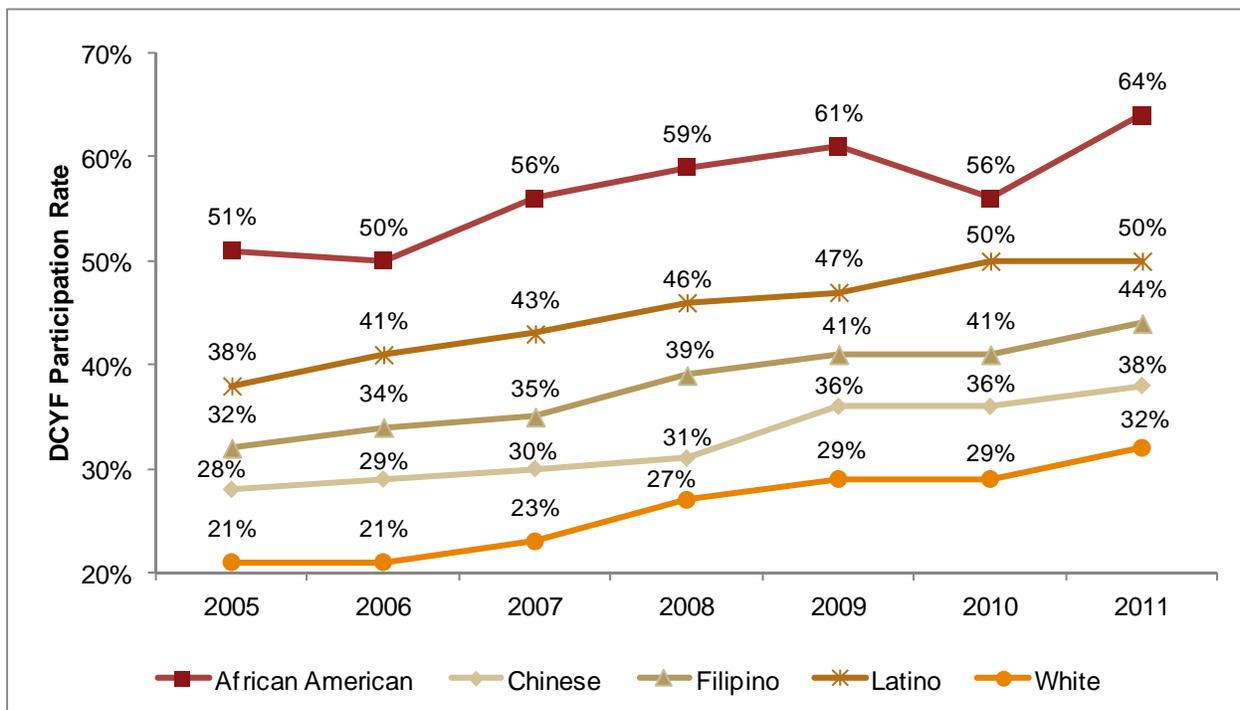
Exhibit 2. DCYF Participant Attendance in 2011



What types of SFUSD students are more likely to participate in DCYF programs?

While differences in participation rates existed along racial and ethnic lines, all groups experienced upward trends in participation during the analysis period. Of the roughly 53,000 students enrolled in SFUSD, only 11% of students identified as white. Non-white students in SFUSD were more likely to participate in DCYF programs than white students in SFUSD. African-Americans students in SFUSD consistently met or surpassed the overall participation rate with at least 50% of African-American students in SFUSD participating in DCYF programs during the analysis period (see Exhibit 3). Moreover, African-American students had particularly high participation rates in Specialized Teen, YWD, and VPI among DCYF participants. Latino students in SFUSD had the second highest participation rates ranging from 38% in 2005 to 50% in 2011. White students in SFUSD showed the lowest levels of participation with rates never surpassing 32% during the analysis period. Asian students in SFUSD participated at levels lower than African-American and Latino students but higher than white students. Among the Asian ethnic groups, Filipino students had the highest levels of participation closely followed by Chinese students.

Exhibit 3. DCYF Participation Rates by Race/Ethnicity from 2005-2011

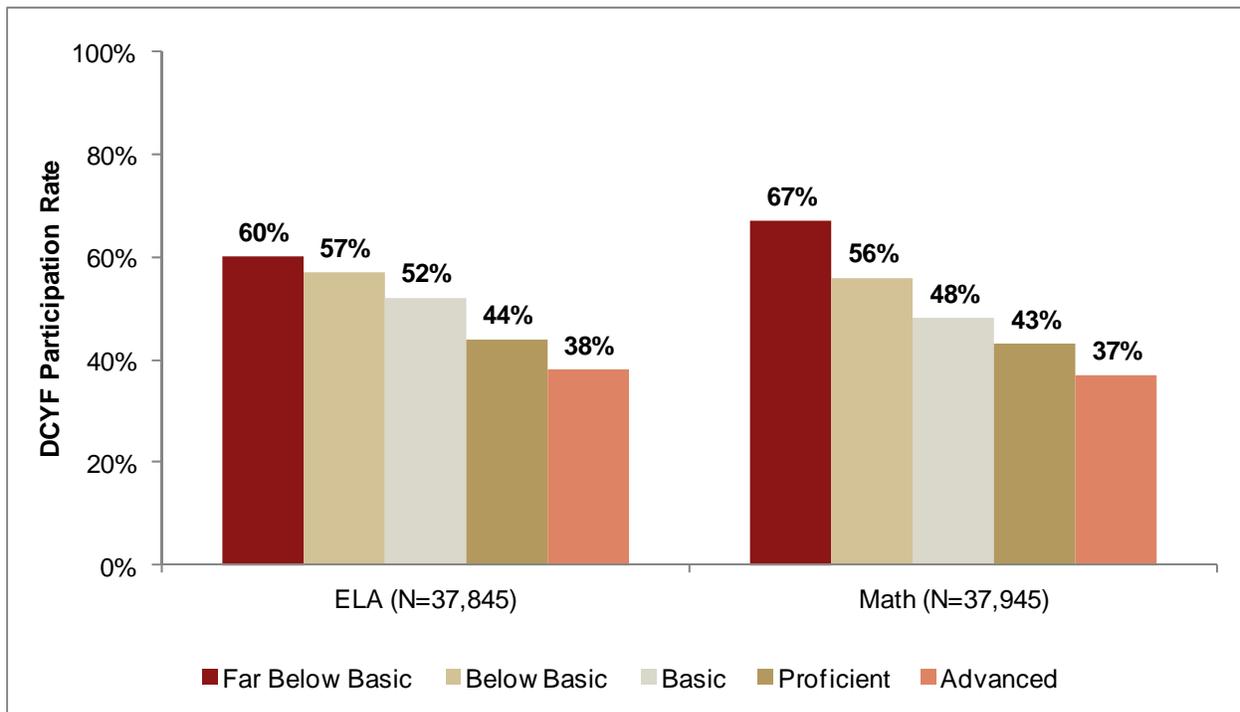


SFUSD students participating in DCYF programs were more likely to come from the lower end of the academic achievement distribution as defined by California Standards Test (CST) performance scores in English language arts (ELA) and math.² For example, in 2011, 60% of

² In 2011, more than half (57%) of SFUSD students in grades 2 to 11 scored at or above proficiency in ELA and two-thirds (66%) scored at or above proficiency in math (<http://star.cde.ca.gov>).

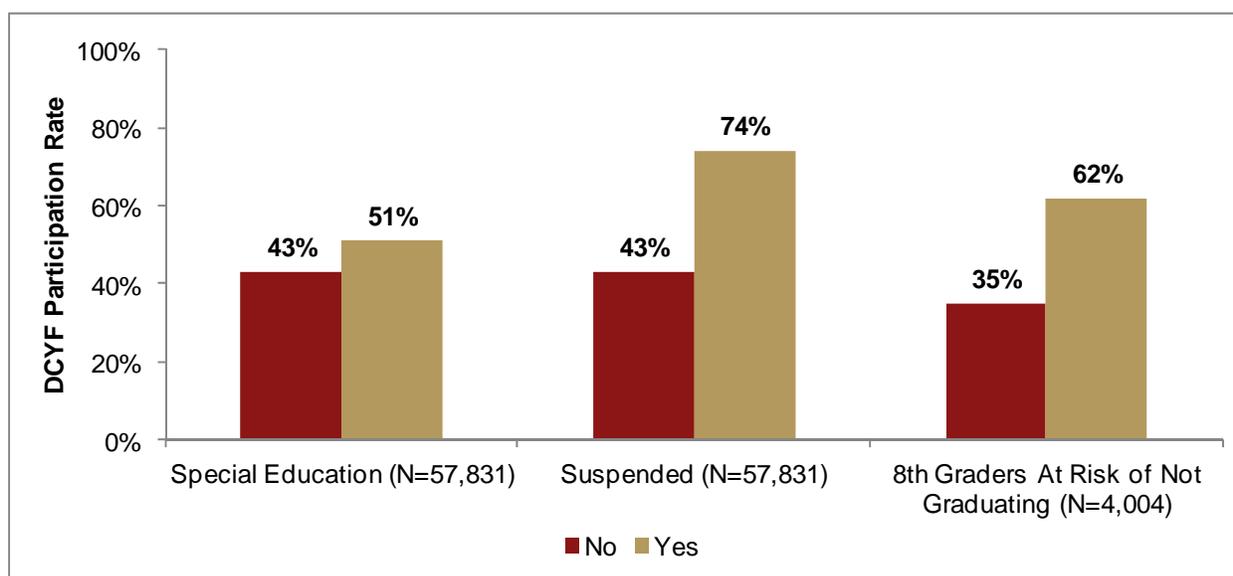
SFUSD students scoring far below basic on the ELA assessment participated in a DCYF program compared to only 38% of SFUSD students classified as advanced (see Exhibit 4). We found a similar pattern in math. In 2011, more than two thirds (67%) of SFUSD students scoring far below basic participated in a DCYF program compared to 37% among SFUSD students achieving the highest performance level. It is important to note that SFUSD administers CST assessments to students in grades 2 through 11; therefore, the CST results do not reflect the relationship between academic performance and DCYF participation for students outside those grades, including preschoolers and young adults.

Exhibit 4. DCYF Participation Rates by 2011 CST Performance



SFUSD students from subgroups requiring additional academic and behavioral supports were more likely to participate in DCYF programs. For instance, students eligible for special education services were more likely to participate than non-special education students (see Exhibit 5). More than half (51%) of special education students participated in DCYF compared to 43% of non-special education students in 2011. Students suspended at least once in 2011 had higher DCYF participation rates than non-suspended students. Almost three quarters (74%) of suspended students were involved with a DCYF program compared to 43% of non-suspended students in 2011. Eighth graders at risk for not graduating—defined through a combination of attendance and test scores—were also more likely to participate than 8th graders not at risk, which amounted to a difference of 27 percentage points.

Exhibit 5. Participation Rates by Student Subgroups in 2011



What are the longitudinal patterns of participation in DCYF programs?

The analysis also examined longitudinal patterns of participation in DCYF programs by examining the number of years that each student participated in each strategy area. Exhibit 6 presents statistics on longitudinal participation in DCYF programs disaggregated by service area. Overall, more than half (55%) of SFUSD students did not participate in any DCYF programs between 2005 and 2011. More than a quarter (28%) of students stayed in at least one DCYF program for one or two years (17% and 11% respectively). Only 5% of students enrolled for more than four years. OST had the highest rate of longitudinal participation, with a total of 22% of all SFUSD students participating for at least two years in any OST program. With respect to race/ethnicity, we found that African American and Latino students were more likely to participate for more than four years. Students who will be first generation college students were more likely to participate more than four years. Moreover, suspended and Early Warning Indicator students had high levels of longitudinal participation.

Exhibit 6: Longitudinal Participation in DCYF Programs (N=146,451)

Years of Participation	Overall	HW	OST	SPECIALIZED TEEN	YWD
No Participation	55%	85%	64%	91%	99%
1	17%	9%	14%	6%	1%
2	11%	4%	9%	2%	0%
3	7%	2%	6%	1%	0%
4	5%	1%	4%	0%	0%
5-7	5%	0%	3%	0%	0%

The analysis revealed high-risk groups and low-achieving students having higher levels of longitudinal participation. Among suspended students, 21% participated in DCYF programs for more than 4 years compared to 4% of non-suspended students. Twenty percent of 8th grade students at risk for not graduating participated in DCYF for more than four years compared to 10% of students not at risk. Ten percent of students with a baseline³ CST ELA performance of far below basic participated in DCYF programs for more than four years compared to 4% of students scoring advanced. Similarly, 10% of students scoring far below basic in math participated in DCYF programs for more than four years compared to 7% of advanced students.

To what extent do high school graduates and postsecondary students from SFUSD participate in DCYF programs?

Using the SFUSD data, we identified high school graduates⁴ and students attending postsecondary institutions and retrospectively examined patterns of participation. The data revealed that high school graduates and postsecondary students had considerable experience with DCYF programs. Among high school graduates, 68% participated in a DCYF program, with 44% participating for one or two years. In addition, high school graduates were more likely to participate in OST, HW, and Specialized Teen programs compared to the other service areas. However, the majority of these students participated at the lowest intensity levels. On average, high school graduates spent more than half (54%) of their time in DCYF programs attending at the lowest intensity levels. For example, if a high school graduate spent four years participating in DCYF programs then approximately two of those years were spent at the lowest dosage (1-10 days).

We found similar retrospective patterns of participation for postsecondary students. Among postsecondary students, 44% had participated in a DCYF program with the bulk of participation lasting between 1 to 2 years (22% and 13% respectively). Similarly, most of the participation was concentrated in HW and OST programs. The intensity of participation in DCYF programs over the years was concentrated at the lowest level of dosage (1-10 days per year).

Conclusions and implications

The collaboration between DCYF, SFUSD, and the Gardner Center enabled us to characterize SFUSD students' participation in DCYF programs between 2005 and 2011. The results from this analysis are descriptive in nature; that is, they do not suggest that program participation caused any specific student outcomes. Despite this limitation, the analysis found that DCYF had a significant presence among SFUSD students and this presence has steadily increased over time. In addition to serving a significant proportion of the SFUSD student body, DCYF programs

³ We define baseline as the first year a student had an opportunity to participate in a DCYF program between 2005 and 2011.

⁴ In 2011, SFUSD had a graduation rate 82%. (<http://www.sfusd.edu/en/news/current-news/2013-news-archive/04/san-francisco%E2%80%99s-graduation-rates-on-the-rise.html>).

were more likely to serve students with the most need. In particular, DCYF programs were more likely to serve low achieving, minority, suspended, and high-risk students. Finally, the majority of SFUSD students in DCYF programs spent 1 to 2 years participating in programs during the study period.

The analysis also revealed differences in participation by service area. OST programs had some of the highest participation rates and attendance levels. In addition, YWD, Specialized Teen, and VPI programs were more likely to serve African-American students, suspended students, and 8th graders at risk for not graduating high school. However, future research efforts should determine if the service area differences are a result of the particular program strategies (academic vs. socio-emotional interventions) or service delivery models (e.g. school-based vs. center-based).

Additionally, the analysis found that a substantial proportion high school graduates and post-secondary students were exposed to DCYF programs during their time at SFUSD. These students spent the majority of their time in OST and HW programs at the lowest levels of intensity (1-10 days a year).

The analysis raises some key questions about intensity and duration of program participation, which are broadly applicable beyond DCYF. Although recruitment strategies are well researched and are often a focus for providers, practices to keep students engaged and attending programs in high dosages are less well established. Given that many programs include in their theories of change a core assumption that students participate regularly over time, it is important to focus on practices that foster not just participation but high-intensity participation in order to seek the greatest benefits to students from that participation. Many OST providers have attempted to improve retention by focusing on program quality, with the assumption that youth are much more willing to consistently attend high-quality programs. To this end, there are several existing tools for measuring program quality that have accompanying materials for using data on program quality to inform practice. Another approach to increasing intensity of service participation could focus on engaging youth in multiple wraparound programs and services, which could be accomplished through collaboration and communication across youth-serving organizations to facilitate referrals across providers. There is also a role for funders to incentivize a focus on consistent participation instead of just requiring a report of number of students served. DCYF, for example, has added requirements regarding intensity and duration of participation to its request for proposals.

Improving data collection is essential to informing questions about intensity and duration of youth participation. Although all DCYF-funded programs use a data system that allows them to track participation, there are many other programs that do not have the capacity that DCYF has to examine how often youth participate. Ideally programs would have the ability to answer questions about dosage via daily or even hourly attendance tracking. Although challenging, there are many management information systems and other technologies, such as bar code

scanners, to help with this task. Another important but challenging task is tracking longitudinal data on participation—i.e., tracking youth participation over multiple years—in order to know the service histories of students. Many data systems are only geared toward annual reporting, but simply extracting data annually and manually linking the yearly extracts can allow for longitudinal participation tracking. Such improvements to data collection can inform strategies to improve program attendance and, ultimately, improve youth outcomes that result from program attendance.

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