

Summer School Grant Evaluation and the Impact of Multiple Programs

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Summer School Grant

In 2011, reallocated Title I, Part A funds were distributed to 29 grantees as part of a competitive Summer School grant. Grantees encompassed 23 districts (3 districts had 2 programs, CSI had 3 programs, and one program was implemented by an outside agency). A total of 5,059 students participated in summer programming. The majority of the students served were Hispanic or Latino (75%) and in elementary school (83%). On average, students completed 62 hours of programming in reading, math, and/or English Language Development (ELD) instruction.

Evaluation Method

The evaluation method used to assess the impact of the program on students served aligns with CDE's evaluation of the SES program. Served students' proficiency level change in academic achievement is compared to the proficiency level change of students, from the same schools, who were also eligible for but did not participate in the grant-funded program. Additionally, the median growth percentiles of the two groups for the year following programming are compared to each other.

Findings

In general, the percentage of the participating students who increased in proficiency level was 16.2% in math, 14.2% in reading grades K-2 (DRA-2), and 23.6% in reading grades 3-10 (TCAP), whereas the percentage increased for the comparison groups were 17.6% in math, 15.1% in reading grades K-2, and 29.2% in reading grades 3-10. The MGP of the participants were 47 in reading and 45 in math. The comparison group, on the other hand, had an MGP of 52 in reading and 45 in math. While there was no statistically significant overall impact of participation in a reading or math program, a few noteworthy trends were detected.

Trends with English Learners (ELs)

Summer school students identified as non-English proficient (NEP) were more likely to demonstrate a higher median growth percentile (MGP) than NEP students from the comparison group (students eligible for summer school services, but did not participate, from the schools implementing the

Summer School Grant Highlights

Overall

- Schools participating in the summer school grant, on average, *increased* SPF percentage points by 3.39%, compared to the 0.20% *decrease* of all schools statewide

Math

- A larger percentage of students served in 7 out of 16 math programs increased at least one proficiency level by the following year TCAP assessment than the comparison group
- Students served by 7 out of 16 math grantees had a higher math MGP than the comparison group

Reading

- A few grantees that implemented reading programs had a larger percentage of students that increased at least one proficiency level on reading TCAP (4 out of 19 grantees) and DRA2 (4 out of 10 grantees) more than the comparison groups

ELD

- The ELD and Jump Start programs, which targeted English language development and reading strategies, increased proficiency levels and growth on both TCAP and CELA more than the comparison group

program). Similarly, NEP students starting unsatisfactory or partially proficient on TCAP, or below grade-level on DRA-2, the year before implementation, were more likely to demonstrate improved proficiency if they participated in summer school than NEP students in the comparison group. This trend was most apparent on math TCAP, with NEP students in summer school demonstrating higher growth (MGP of 45) and increase in proficiency level (17% improved) compared to the NEP students in the comparison group (MGP of 38; 12% improved).

Effective Math Grantees

Although the overall impact of the program yielded variable results, students served by some of the reading and math summer school programs increased their proficiency level and/or had a higher median growth percentile than the comparison group. Sixteen grantees, with a minimum of 20 students served with valid TCAP results, were evaluated in math. Over half (nine grantees) demonstrated higher growth and/or higher percent improved than the comparison group. Five had both a higher MGP and a higher percentage of students that increased in proficiency level. The table below indicates (green shading) the areas in which the grantees outperformed the comparison group.

The average number of program hours provided ranged between 19 to 57 hours per student in math programs with higher MGPs and between 17 to 60 hours in programs with higher percent improved.

Grantee	Served for Math (N)	Valid CSAP / TCAP Data (N)	Median Growth Percentile	Average Hours Completed (Students with MGP Data)	Started Unsatisfactory or Partially Proficient (N)	Improved at Least One Proficiency Level		Average Hours Completed (Students Starting US or PP)
						N	%	
Pinnacle	47	35	57.0	57.2	34	6	17.65	58.1
Summit School District*	95	34	56.5	19.0	22	6	27.27	18.7
Poudre	63	25	54.0	33.4	20	4	20.00	27.9
Denver Public Schools*	393	163	53.0	24.8	130	19	14.62	25.6
Brighton 27J	92	82	52.5	17.3	73	13	17.81	17.1
Garfield	79	26	51.5	31.2	22	5	22.73	31.4
Montrose*	163	77	48.0	31.5	60	8	13.33	31.6
Mesa 51*	439	144	44.5	60.1	98	26	26.53	60.1
Jefferson County*	115	56	43.5	17.5	39	8	20.51	17.7
Comparison	N/A	745	45.0	N/A	547	96	17.55	N/A
Mapleton*	88	20	40.0	19.4	< 20	--	--	19.2
Scholars to Leaders	78	32	38.0	34.7	21	3	14.29	34.7
Sheridan*	195	87	37.0	40.5	73	7	9.59	41.1
Valley RE-1	86	50	35.5	54.8	21	3	14.29	52.9
Glenwood Springs	148	69	35.0	31.9	53	4	7.55	31.1
Thompson School District*	138	29	34.0	18.8	< 20	--	--	18.6
Crystal River	129	24	20.0	23.7	< 20	--	--	23.7
<i>Grantees below have fewer than 20 students with valid CSAP/TCAP data</i>								
Aurora Public Schools*	160	< 20	--	N/A	< 20	--	--	N/A
Englewood - Bishop	22	< 20	--	38.4	< 20	--	--	37.8
Englewood - Cherrelyn	56	< 20	--	36.5	< 20	--	--	36.3
Ignacio	26	< 20	--	27.6	< 20	--	--	29.0
Platte Valley MS*	17	< 20	--	59.9	< 20	--	--	59.9

* Indicates grantee also offered Supplemental Educational Services (SES) during the 2011-12 school year

Effective Reading Grantees

Ten grantees were evaluated with DRA-2 data, with four demonstrating a higher percent of students who started below grade-level and subsequently improved to at or above target.

The average number of program hours provided ranged between 36 to 71 hours per student in the reading programs provided to younger students (K-3) that demonstrated higher percent improved.

Grantee	Served for Reading (N)	Valid DRA2 Data (N)	Started Below Grade-Level Target (N)	Improved in 2011-2011		Average Hours Completed (Students Starting Below Grade-Level)
				N	%	
Valley RE-1	86	21	21	5	23.81	52.0
Denver Public Schools*	372	109	69	16	23.19	36.2
Mesa 51*	462	224	172	37	21.51	61.8
Summer Scholars*	465	183	127	21	16.54	71.4
Comparison Group	N/A	1,237	890	134	15.06	N/A
Poudre	92	30	21	2	9.52	38.3
Boulder Valley Schools*	101	83	63	5	7.94	20.8
Aurora Public Schools*	202	147	84	5	5.95	41.0
Englewood - Cherrelyn	56	27	24	1	4.17	67.1
Glenwood Springs	148	67	49	2	4.08	32.8
Crystal River	129	60	53	1	1.89	24.7
<i>Grantees below have fewer than 20 students with valid DRA-2 data</i>						
Englewood - Bishop	24	< 20	--	--	--	38.7

* Indicates grantee also offered Supplemental Educational Services (SES) during the 2011-12 school year

Nineteen grantees were evaluated with reading TCAP data, with eight demonstrating higher growth and/or higher percent improved than the comparison group. Two grantees, Mesa 51 and Summer Scholars, were above the comparison group for both assessments in all of the reading evaluations. Six grantees had a higher MGP than the comparison group and four had a higher percentage of proficiency level change.

The average number of program hours provided ranged between 19 to 120 hours per student in reading programs with higher MGPs and between 31 to 71 hours in programs with higher percent improved.

Grantee	Served for Reading (N)	Valid CSAP / TCAP Data (N)	Median Growth Percentile	Average Hours Completed (Students with MGP Data)	Started Unsatisfactory or Partially Proficient (N)	Improved at Least One Proficiency Level		Average Hours Completed (Students Starting US or PP)
						N	%	
Pinnacle	66	50	63.0	53.3	42	11	26.19	53.5
Poudre	92	46	58.0	43.0	38	6	15.79	42.3
St Vrain*	254	65	57.0	120.2	58	16	27.59	120.1
Mesa 51*	462	144	56.5	62.7	119	42	35.29	62.5
Summit School District*	95	33	54.0	18.9	28	7	25.00	18.8
Summer Scholars*	465	173	53.0	71.4	137	43	31.39	71.2
Sheridan*	195	86	50.0	40.5	68	20	29.41	41.1
Glenwood Springs	148	69	49.0	31.9	57	17	29.82	31.4
Comparison Group	N/A	1,446	52.0	N/A	1,142	333	29.16	N/A
Denver Public Schools*	372	139	49.0	24.4	103	23	22.33	26.0
Garfield	79	26	48.0	31.2	24	3	12.50	31.0
Brighton 27J	92	84	46.5	17.2	69	20	28.99	17.1
Jefferson County*	117	53	44.0	21.9	41	6	14.63	22.0
Montrose*	163	75	42.0	42.0	68	9	13.24	42.1
Valley RE-1	86	50	41.5	54.8	29	5	17.24	54.6
Scholars to Leaders	76	32	40.5	34.7	< 20	--	--	34.8
Adams 12	294	123	35.0	42.8	97	8	8.25	42.3
Crystal River	129	23	35.0	23.6	< 20	--	--	23.1
Thompson School District*	138	29	34.0	20.5	< 20	--	--	20.2
Greeley 6*	226	61	29.0	39.6	55	10	18.18	39.8
<i>Grantees below have fewer than 20 students with valid CSAP/TCAP data</i>								
Aurora Public Schools*	202	< 20	--	N/A	< 20	--	--	N/A
Englewood - Bishop	24	< 20	--	36.8	< 20	--	--	35.3
Englewood - Cherrelyn	56	< 20	--	67.1	< 20	--	--	66.9
Ignacio	26	< 20	--	27.5	< 20	--	--	27.7
Mapleton*	88	< 20	--	19.3	< 20	--	--	19.2

* Indicates grantee also offered Supplemental Educational Services (SES) during the 2011-12 school year

English Language Acquisition (ELA) Programs

Westminster 50 provided two conceptually different summer school programs for students in the district. The Jump Start program was offered to students transitioning into Kindergarten, with a focus on language development and reading strategies. The ELA program focused on reading interventions and English language acquisition skills for ELL students up to tenth grade.

Overall Effectiveness

Students who participated in the Jump Start or ELA programs demonstrated higher median growth percentiles on both CELA and reading TCAP than comparison students, from the same district, who did not participate in the program. The percent of students improving at least one proficiency level, however, did not differ between summer school and the comparison group.

Jump Start Program

Students in the Jump Start program had an MGP of 48 on the CELA assessment, compared to an MGP of 41 for the comparison group (Kindergarten students from the district who did not participate but

had similar beginning CELA performance). Although 82.0% of the Jump Start students, improved at least one proficiency level in 2012, an equivalent percent of comparison students (82.3%) also improved.

ELA Program

Students in the ELA program had an MGP of 52 on the CELA assessment and an MGP of 53 on Reading TCAP, compared to MGPs of 50.5 and 46, respectively, for the comparison group. The greatest differences in MGP and proficiency between students in the ELA program and the comparison group were for limited English proficient (LEP) students. LEP students who participated in the ELA program demonstrated higher growth on CELA (MGP of 57) and reading TCAP (MGP of 55) than the LEP students in the comparison group (MGP of 45.5 and MGP of 44, respectively). Results were statistically significant for TCAP ($U = 24290.5$, $p = 0.024$), but not for CELA ($U = 21727.5$, $p = 0.098$). LEP students in the ELA program were also more likely to improve at least one proficiency level (53% improved on CELA; 28% improved on TCAP) than those in the comparison group (47% improved on CELA; 22% improved on TCAP). However, the results were not statistically significant on either assessment (CELA, $\chi^2(1, N = 187) = 0.607$, $p = 0.436$; TCAP, $\chi^2(1, N = 374) = 2.046$, $p = 0.153$).

Next Steps for the Summer School Evaluation

In evaluating this data, it is apparent that some of the grantees were more effective with increasing student performance. In order to determine what characteristics were unique to these grantees (and not present in the grantees who did not demonstrate success), further investigation of the programs implemented by these grantees is warranted. Additional questions to address include:

1. How were the effective programs implemented (dosage, location, teacher-student ratios, etc.) that varied from the way that less effective programs were implemented?
 - a. Which of these components were similar across the effective programs?
 - b. Were there barriers experienced by the less effective programs? If those same barriers existed in more effective programs, what strategies did they use to overcome them?
2. How did successful grantees allocate funds (professional development, materials, etc.) that differed from the way that less effective grantees allocated funds?
3. Did program implementation vary across programs? How did programs ensure implementation fidelity and was that a contributing factor to the results obtained?
4. What successes and challenges did the effective grantees report in their local evaluations compared to the other grantees?

CDE will develop grantee profiles based on case studies of the more effective Summer School programs and will develop recommendations for future programs based on the commonalities across the more successful programs.

Effects of Multiple Programs

Summer School and Supplemental Educational Services (SES)

The summer school grant was designed to provide additional direct instruction learning opportunities to students. Similarly, SES, another Title I, Part A funded program, provides individual and group tutoring to students in the same content areas. In order to identify the impact of students' participating in both of these extended learning opportunities, the overlap between SES and summer school was evaluated. Over half of the schools participating in Summer School also implemented SES in the year prior to the grant (2010-2011) and/or in the year following (2011-2012). Approximately 20 percent of students who participated in Summer School also received SES instruction at some point during those two years.

Student Performance

Analyses of the effectiveness of the summer school reading and math programs did not significantly differ by SES participation. For the ELA program, however, students who also participated in reading SES demonstrated higher growth (MGP of 61 on CELA, and 58 on reading TCAP) and were more likely to improve proficiency levels (64% on CELA, 28% on TCAP) than students who only participated in the Summer School and not SES (MGPs of 50 and 52; 48% and 22% improved, respectively). For CELA, results were statistically significant on both MGP ($U = 18157, p = 0.010$) and the percent of students improving at least one proficiency level ($\chi^2(1, N = 330) = 5.618, p = 0.018$). Results for TCAP, however, were not significant for either MGP ($U = 7191.5, p = 0.315$) or percent improved ($\chi^2(1, N = 303) = .854, p = 0.355$). These trends suggest that additional dosage and exposure to multiple reading programs is more likely to improve reading proficiency for English learner students.

School Performance Frameworks

Although the impact of the summer school grant on students' assessment results is variable across grantees, participation in the program was correlated with an increase in the percent of points earned overall on the school performance frameworks (SPFs). For all schools statewide (at the EMH level, excluding AECs), there was little change in the percentage points earned on the SPFs from 2011 to 2012 (average change of -0.21%). Schools that participated in the summer school grant, however, had an average change in percentage points of 3.39% from the 2011 SPF to the 2012 SPF. Schools that participated in both the Summer School Grant and the SES program had an even higher change in percentage points (average of 3.62%).

Multiple Federally-Funded Programs

As evidenced by the overlap in summer school and SES, schools often participate in numerous programs and grants concurrently, which are usually targeted toward the same outcome: increasing student achievement. Summer school and SES offer direct instruction to the students, while the Title II, Part B Mathematics and Science Partnership (MSP) program was designed to increase the content knowledge and teaching skills of classroom teachers. Additionally, the Title I, Part A Tiered Intervention Grant (TIG) provides support to low performing schools, with the awarded funds

designed to implement a school intervention model that will assist in increasing the academic achievement of all students. To evaluate whether participation in multiple programs increases a school's performance, analyses were conducted on the change in SPF percentage points based on the number of programs implemented. On average, schools that did not participate in any of the above programs (Summer School, SES, MSP, and TIG), as well as those that only participated in a single program, experienced a slight decrease in SPF percentage points from 2011 to 2012. Schools participating in two of the programs, however, had an average change of 1.55%, while schools participating in three or four of the programs had an average change of 11.48% from the 2011 to 2012 SPF. An analysis of variance (ANOVA) was conducted to compare the effect of the number of programs on the average change in SPF percentage points, and results were statistically significant ($F(3,1828) = 7.515, p < 0.01$). Tukey post-hoc tests revealed that the average change in SPF percentage points was statistically significantly higher for schools participating in three or four programs than for schools not participating in any of the programs, schools participating in only one program, and school participating in two programs ($p < 0.01$ for all comparisons). There were no other statistically significant differences between the groups. These trends suggest that providing extra support to the teaching staff and school, in conjunction with additional direct instruction for students, increases a school's overall performance.

Next Steps for Evaluating the Effects of Multiple Programs

In evaluating the SPF data, trends were discovered which indicate that schools participating in multiple federally-funded programs may be more likely to improve (as evidenced by the school performance frameworks) than schools not participating in any of these programs. This is the first time that CDE has detected such patterns and further investigation is warranted to determine if the patterns exist across years. In the meantime, to better understand the similarities and differences among the high and low change schools follow-up analyses will be conducted. Specifically, the following questions will be considered:

1. Which schools demonstrated the highest *increase* in SPF percentage points from 2012 to 2013?
How does this compare when looking at 3-year change?
 - a. Of those schools, how many have and/or are currently participating in federally-funded programs? Which programs?
 - b. Are many of the schools from the same district? If so, what district-level effects could attribute to the school's success?
 - c. Are there other similarities across these schools?
 - d. What component(s) of the school performance frameworks contributed the most to these increases (Academic Achievement, Growth, or Growth Gaps)?
2. The above will be compared to the schools with the most *decrease* in SPF percentage points.