



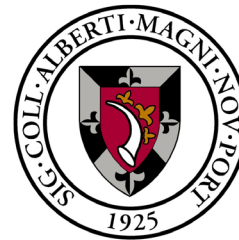
CCERC

2022 Summer Enrichment Program Evaluation

JANUARY 29, 2024

**Center for Connecticut
Education Research Collaboration**

Partner Institutions





2022 Summer Enrichment Program Evaluation

JANUARY 29, 2024

Submitted by the University of Connecticut Evaluation Team

Casey Cobb
Kiah DeVona
Kenya Overton
Jennie McGarry
Charles Wentzell
Donald McAulay
Jung W. Lee
Timothy Moore

About CCERC

The Center for Connecticut Education Research Collaboration (CCERC) is a research partnership between the Connecticut State Department of Education (CSDE) and institutions of higher education across Connecticut. CSDE sets the agenda, identifies projects, and allocates funding for CCERC. The University of Connecticut manages funding and provides an administrative team. A Steering Committee composed of researchers from various Connecticut institutions guides the administrative team in developing and approving research projects and reports. Researchers from Connecticut universities and colleges constitute the research teams. The mission of CCERC is to address pressing issues in the state's public schools through high quality evaluation and research that leverages the expertise of researchers from different institutions possessing varied methodological expertise and content knowledge.

CCERC was formed initially using federal relief funds to investigate the impact of the COVID-19 pandemic on learning and well-being and recovery efforts in the state's schools. The partnership was subsequently institutionalized to respond to ongoing evaluation and research needs of the CSDE, provide research opportunities for Connecticut researchers, and foster collaboration across the state's institutions of higher education.





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☑ The Connecticut State Department of Education (CSDE) launched its Summer Enrichment Program in Spring 2021 to provide Connecticut students opportunities for socialization, learning, and fun as the state eased its COVID pandemic restrictions. Recognizing that students and families across the state continued to feel the effects of the pandemic, and given the successes of the inaugural initiative, the CSDE continued the Summer Enrichment Program in 2022. (Stock Photo)

Executive Summary

INTRODUCTION

The Connecticut State Department of Education (CSDE) launched its Summer Enrichment Program in Spring 2021 to provide Connecticut students opportunities for socialization, learning, and fun as the state eased its COVID pandemic restrictions and prepared for the return to in-person school in Fall 2021. A primary objective of the Summer Enrichment Program is to offer enjoyable and enriching activities to Connecticut students, fostering their social, emotional, and physical well-being. Recognizing that students and families across the state continued to feel the effects of the pandemic, and given the successes of the inaugural initiative, the CSDE continued the Summer Enrichment Program in 2022. Summer enrichment remains one of six priorities of the CSDE's *Accelerate CT* Initiative.¹

Due to a significant rise in applications, the CSDE increased its initial \$8M allocation to \$12M. The CSDE awarded Innovation Grants ranging from \$78,639 to \$225,000 to 18 programs to provide students with innovative summer programming and increase

¹ portal.ct.gov/SDE/COVID19/AccelerateCT

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Due to a significant rise in applications, the Connecticut State Department of Education increased its initial \$8 million allocation for the Summer Enrichment Program to \$12 million.

opportunities for low-income students to access summer programs.² It also awarded Expansion Grants of between \$6,300 and \$67,500 to 182 programs to expand student participation and programming at existing summer camps. Camps were operated by various organizations and offered a range of programming and activities, such as sports and recreation, theater, Science, Technology, Engineering and Math (STEM), mentorship, and horse riding, among many more. Several organizations collaborated with local non-profits, agencies, and schools to engage low-income students.

EVALUATION DESIGN

The Center for Connecticut Education Research Collaboration (CCERC)³ commissioned an evaluation study of the 2022 Summer Enrichment Program. Our evaluation sought to assess the degree to which the Summer Enrichment Program achieved its desired objectives. Program goals included (a) expanding or creating opportunities for children to participate in high-quality summer programming; (b) adopting a community-wide approach to planning and delivering such programming; (c) addressing students' academic, social, and emotional needs, particularly in light of the post-pandemic context; and (d) prioritizing serving marginalized student populations.

The evaluation aimed to understand how camps utilized grant funds to improve student experiences and increase access. We also sought to identify key challenges and successes. In addition, the evaluation set out to estimate the impact of camp participation on student engagement in school. Finally, given the initiative's emphasis on serving historically marginalized students, the evaluation also explored the camps' commitment to social justice and equity.

We based the evaluation on multiple sources of data. A major component

included comprehensive site visits to 11 camps. Evaluation team members observed camp activities during the visits and took extensive field notes. In addition, evaluators facilitated focus group interviews with students and staff at each site. Another major data source included a student survey administered to a sample of 23 camps and completed by 1,336 students. We also surveyed 172 site supervisors.⁴ The survey solicited information on various topics, including camp enrollment, activities, challenges, and successes. Additionally, we conducted short check-in visits at another 36 camps. Lastly, we analyzed student-level data to estimate the effect of camp participation on school attendance in the following year.

MAJOR FINDINGS Year-Over-Year Enrollment Increases

Although comparisons across the first two years of the initiative can be imprecise, generally speaking, camp enrollments in 2022 were up relative to 2021. For instance, among the 145 camps that reported numbers for 2021 and 2022, total enrollment in 2022 was 27.4% higher

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than the previous year (41,790 vs. 32,814 students) (see Table ES1).⁵ Of the 145 camps in this group, 122 (84%) exhibited an increase in enrollment, with an average increase of 79 students per camp. The increases in student enrollment could be attributable to the scholarships and fee waivers made available by Summer Enrichment funds. Seven out of ten (69.7%) site supervisors reported using

their Summer Enrichment grant funds to support student scholarships or fee waivers. Moreover, over one-quarter of the students we surveyed (27.5%) indicated this was their first time

attending a summer program.⁶

Students Enjoyed Their Camp Experiences

The student survey asked three questions to gauge students' enjoyment of camp. Roughly 7 of 10 students (71.3%) had “a lot” of fun while attending their summer program. Not even 1% stated that they had no fun. On a scale of 0 to 10, with 0 being the worst and 10 the best, 38.1% of the students rated their summer program a 10, and another 38.7% rated their summer program an 8 or 9 (Figure ES1). When students were asked what they would change about their summer

Table ES1. Student Enrollment for Sites Operating in both 2021 and 2022 (n=145).

	2021	2022 ⁷	Difference
Total enrollment	32,814	41,790	+8,976 (27.4%)
Median camp enrollment	120	160	+40 (33.3%)
Average camp enrollment	226	288	+62 (27.4%)

² CSDE 2022 Summer Enrichment Program

³ portal.ct.gov/CCERC

⁴ Some supervisors oversaw multiple camps. Three of the 172 supervisors submitted one survey for two camps, yielding information on 178 camps. In some cases, survey items were left blank; accordingly, we treated those items as missing.

⁵ Comparisons across the past two years should also be considered in the context of changes to Summer Enrichment Program funding parameters, which led to an overall decrease in the number of camps awarded in 2022 (i.e., 235 in 2021 vs. 200 in 2022).

⁶ One might expect first-time campers to come from the youngest grade levels; however, the 3rd graders in our sample were only marginally higher (30.5%) than the average.

⁷ There was a discrepancy in the number reported via the evaluation site supervisor survey (41,790) and student intake data collected by site supervisors on behalf of the state (37,124). There are likely many explanations for the difference, but we are uncertain of the exact source.

program, the most common open-ended answer was “nothing.” Lastly, 72.8% of students said they would return to their camp next summer if they could, another 23.2% said they might attend, and only 3.9% would not return.

Field Trips, Counselors, and Free Time were Most Favored by Students

Of the camps that offered *field trips*, 8 of 10 students (80.7%) reported liking them “a lot!” (Table ES2). Students also overwhelmingly appreciated their *counselors*, with 77.3% liking them “a lot!” About three-quarters (74.3%) of students liked *free time* “a lot!” and another 20.9% liked free time “somewhat.” *Learning activities* and *acting, music, or dance activities* were not very well-liked by a quarter of the students who experienced them.

Figure ES1. Students’ Overall Rating of Camp (n=1,236).

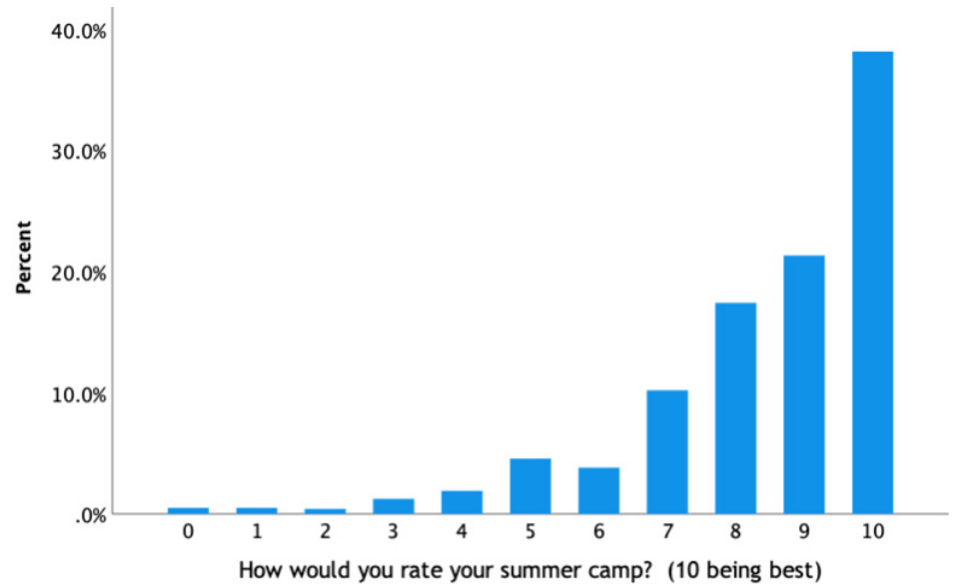


Table ES2. Student Ratings of Camp Activities/Characteristics.

	Percent				N
	A lot!	Somewhat	Not very much	Not part of camp	
How much did you like these parts of the summer program?⁸					
Field Trips	80.7	16.5	2.8	28.9	806
Counselors, Teachers, and Adults	77.3	20.0	2.6	0.7	1,129
Free Time	74.3	20.9	4.8	6.5	1,062
Outdoor activities	68.4	25.9	5.7	5.4	1,068
Sports	63.8	24.0	12.3	7.9	1,044
Computer or Technology activities	58.2	30.8	11.0	46.4	595
Food, Drink, and Snacks	55.3	37.6	7.1	7.5	1,049
Arts & Crafts activities	51.5	34.3	14.2	6.2	1,056
Acting, Music, or Dance activities	40.0	35.8	24.2	38.7	679
Learning activities (math, reading, or science)	32.8	42.2	25.0	37.1	695

⁸ Student ratings are for only those camps that offered the activity.

Camps Fostered Excitement for School

Students were asked about the extent to which their summer program fostered excitement to return to school. A little over one-quarter (25.2%) who answered this question said they were “a little more excited,” while another 22.4% said they were “a lot more excited.”

Grant Funds Most Used for Materials, Staff, New Activities, and Scholarships

At least 70% of site supervisors reported using Summer Enrichment funds for purchasing additional materials, hiring more staff, new student activities, and scholarships/fee waivers (Table ES3). About half (51.4%) of the camps used funds to support field trips. Supervisors also had the opportunity to submit “other” uses of funds. Roughly 1 out of 10 supervisors indicated they spent grant funds on transportation.

Camps Offered a Range of Hands-on Activities, but Weather Posed Challenges

Summer camps of all types offered a range of activities to students. Site supervisors reported that camps relied most heavily on *outdoor activities*,⁹ with 75.0% reporting using *outdoor activities* “a lot” (Table ES4). *Arts and crafts* and *sports* were also a large part of many of the camps, with 71.3% and 58.4% reporting using them “a lot,” respectively. *Learning activities*, such as skill-building in reading or math, were employed “a lot” by 43.9% of camps and “a moderate amount” by another 24.6%. Two-thirds of camps (67.3%) offered *field trips* “a lot” or “a moderate amount.” For outdoor activities, including sports and field trips, inclement weather posed challenges for some camps; rain or excessive heat made it difficult or untenable to continue such activities as planned. The evaluation team observed camps with varying capacities to accommodate students under poor weather conditions, depending on space and facilities.

Table ES3. Use of Grant Funds as Reported by Site Supervisors (n=175).

Use of Grant Funds	Number	Percent
Purchasing additional materials	133	76.0
Hiring more staff	132	75.4
New student activities	125	71.4
Scholarships/Fee waivers	122	69.7
Field trips	90	51.4
Staff training	78	44.6
Other: Transportation	16	9.1
Other: Food/Snacks	13	7.4

Table ES4. Summer Program Activities as Reported by Site Supervisors (n=175).

Activity	Percent			
	A Lot	A Moderate Amount	A Little	None at All
Outdoor activities	75.0	20.8	3.6	0.6
Arts & Crafts	71.3	22.8	2.9	2.9
Sports	58.4	32.5	6.0	3.0
Learning (e.g., math, reading)	43.9	24.6	27.5	4.1
Field Trips	27.4	39.9	9.5	23.2
Acting, Music, or Dance	26.5	35.9	28.2	9.4
Computer or Technology	16.6	24.3	34.3	24.9
Free Time	10.6	47.1	38.8	3.5

⁹ Although we did not offer a distinction on the survey, outdoor activities could also include sports. Sports is a separate category and could be done indoors.

Increased Opportunities for Academic Enrichment

Notable during the 2022 grant cycle was the academic programming camps were able to offer their students. Forty-one percent of supervisors cited academic achievement as a program highlight this year. STEM and literacy programs were especially popular. Of the 70 camps that highlighted academic achievement, 30.0% reported quantifiable gains in students' academic learning, often using local assessment measures or the Connecticut math standards to measure learning growth. At one site, educational programming helped 83.0% of students improve their reading skills. Another site shared that 97.0% of students reported feeling excited to learn new things after participating in their learning program.

A Focus on Social-Emotional Learning

Social-emotional learning was a popular curricular focus. Of 170 supervisor open-ended responses, 29.4% named SEL achievement and SEL-related staffing (e.g., hiring behavioral specialists, licensed clinical social workers) as a program highlight, and at least 32 supervisors also indicated their plans to build SEL into next year's summer programming. One supervisor noted that *"having a mental health counselor on-site is now non-negotiable."* Supervisors illustrated how summer camp programs can function as essential safe havens where students can take risks, build important life skills, and have fun within a carefully constructed learning environment. Camps reported that intentional SEL programming led to students demonstrating "improvement in attitudes and self-confidence, as evidenced by developmental assets surveys and evaluation." In practice, camps saw SEL gains when students were "learning to work together as a group" and "being able to express themselves and being with their peers in a fun way."

Social Interactions at Camp Were a Concern for at Least Some Students

Although most students had positive camp experiences, some expressed dissatisfaction with social interactions. When students were asked what they would change about camp, 9.2% said *kids*, 3.1% cited *nicer people*, and 2.3% noted *better groups*. These responses

“*Students who went to camp had a slightly higher school attendance rate (94.3%) the following year than those who did not attend camp (93.7%). Students who participated in at least 20 days of camp — “high dosage” campers — had a 3% higher predicted attendance rate than non-campers (96.1% vs. 93.1%). Notably, high dosage campers in grades 6-8 were 36.1% less likely to be chronically absent than non-campers.*

suggest that 14.6% of students felt social interactions could be improved. This level of dissatisfaction is consistent with student survey responses to the statement, “students are nice to each other,” where 23.2% indicated “sometimes,” 8.1% “once in a while,” and 2.3% “never.”

Summer Camp Participation Appears to Influence School Attendance Positively

Results from the impact analysis indicate that students who went to camp had a slightly higher school attendance rate (94.3%) the following year than those who did not attend camp (93.7%), while controlling for student background characteristics. Students who participated in at least 20 days of camp (“high dosage” campers) had a 3% higher predicted attendance rate than non-campers (96.1% vs. 93.1%). Extrapolating to a full 180-day school year, a 3% difference equates to an extra 5.4 days of school among high-dosage campers. Even more notable were the estimated effects on chronic absenteeism. High dosage campers in grades 6-8 were 36.1% *less likely* to be chronically absent than non-campers.

Staffing Remains a Primary Challenge

Site supervisors consistently noted the need for consistent, reliable staffing. Almost half (46.0%) of site supervisors

named staffing as a top challenge during the 2022 camp season. Camps experienced staffing shortages throughout the summer. As one supervisor explained, “We couldn’t hire enough staff to cover the overflow of children. We staffed for the 100 children we planned on but couldn’t cover additional children who also wanted to join above that amount. The staffing shortage was the worst we have ever had.” Camps that could hire

enough staff focused on training, developing, and compensating their employees throughout the summer. In addition to supporting general camp staff, 29.0% of supervisors also named hiring and staff development as something they

focused on during the camp season, particularly to support campers’ social-emotional learning (SEL). “Having a behavior support specialist made a difference in our program,” one supervisor explained, “both for the students and the ‘regular’ staff.” Supervisors seemed to agree that increased funding would enable camps to hire, develop, and retain effective staff at their sites.

Timing of Receiving Grant Funds an Issue

Nearly half (49.0%) of site supervisors noted the need to receive grant funds earlier. One supervisor explained, “We can’t hire staff if we don’t know funds will be available to pay them. We also can’t increase enrollment if we don’t have additional hired staff.” Many camps begin planning summer programs in the early spring, so applying for the grant program in March and learning about their grant decisions in April would offer camps “plenty of time to plan for an amazing summer,” as another supervisor shared. Receiving funds in early or mid-summer puts camp supervisors in situations where they find themselves “making decisions hoping the dollars will come through” and making last-minute changes to their budget or programming in the face of changed funding availability.

Recommendations

Below we offer recommendations based on our findings, the summer camp research literature, and our continued involvement in evaluating the Summer Enrichment Program over two years (see [year 1 report](#) for more information). The recommendations are made with two general audiences in mind – state policymakers and camp leaders – although some recommendations remain more relevant to one or the other group.


1. Aim for the Equitable Distribution of Funding

Discernible across multiple site observations was the impact that camp facilities had on the allocation of grant funding. For example, one site was located on the campus of an affluent high school. The camp had free access to many classrooms across the campus, including computer and science labs and an expansive library. Given these affordances, the camp was able to use grant funds to hire a full-time SEL counselor for student support and expand its scholarship program. In contrast, other camps with lesser facilities were obligated to spend their funds on more basic needs. As an example, one camp situated in the rear lot of an elementary school, with little to no shade, used a large portion of its funds to purchase passes to the town pool. There was a basic need to get students some shelter during hot weather. In both scenarios, students benefited from the application of funds; however, the camp with the lesser facility used a greater proportion of its funding to make up for its shortfall in facilities. The state may consider need-based allocations and prioritize additional funding for less-resourced camps.

2. Explore Group Access to Regional Entities

Staff and students commonly highlighted access to field trips, special destinations, and unique programming as sources of excitement. Some camps were able to make up for limited facilities by taking their students on field trips or bringing presenters to their sites. One camp regularly invited special guests on Fridays, while another recruited experts to share their knowledge on specific topics, such as the history and pottery of Indigenous Americans. Other camps purchased passes to pools or recreation facilities. Given the attraction and enrichment benefits of field trips, the state may help facilitate low-cost access to common points of interest. For example, the state could consult with camps to identify educational or recreational entities (e.g., Connecticut Science Center, Mystic Aquarium) by region and negotiate cost-effective bulk rates for attendance. Such actions could inspire camps that might not have otherwise considered these experiences.



 (Stock Photo)

3. Explore a Centralized Hiring Database and State Logistical Support

Staffing emerged as a major concern for many camps across the state. In one camp, counselors were working 12-hour days on occasion to provide before and after care due to inadequate staffing. Another camp pointed to chronic understaffing as a reason they relied heavily on volunteers. Ironically, staffing shortages were exacerbated when enrollment was expanded through increased scholarships. In another camp, a staff member noted the difficulty in attending to individual students' social-emotional well-being while being responsible for large groups of children. From our observations, camps appeared to rely on peer networks for recruiting staff; many were former campers or previously connected to the program in some manner. Given the staffing challenges, it may benefit camps to participate in a collective job board similar to the CTREAP teaching job posting system. This could empower camps to fill existing vacancies or help them find specialists such as SEL coaches or trained counselors to better serve their students. Another possible option is for camps to collaborate with state workforce development programs, particularly those aimed at young adults.

4. Fine-tune the Logistics of the Grant Application and Awarding Process

Site supervisors requested that the application and award process begin earlier to adequately plan for staffing, programming, and increased student enrollments. Some also suggested simplifying the online portal and offering short video tutorials for portal navigation. Others requested reducing the amount of data entry requirements during the busy season. One of the more pressing concerns for some camps was not receiving their grant funding until late summer. Perhaps the state can collaborate with a small group

Recommendations, cont.

of camp leaders to develop a schedule that would work efficiently for state personnel and camps.

5. Focus on Sustainable Expansion

An important consideration for grant recipients is to use grant funds in a sustainable manner both for in-season logistics and long-term planning. Using the grant funds for expansions to the camp — in terms of programming, facilities, or number of students — may appear desirable and straightforward, but doing so without careful consideration of the implications could prove problematic down the road. For instance, expanding the number of campers without adding extra staff may stress the operations of a program. Increasing the program size by using grant funds for scholarships may help a camp serve more students, but if well-trained staff are not added commensurately, student and staff experiences can suffer. At one of our site visits, a major complaint from students was that they did not have enough time to engage in the activities they enjoyed, partially due to expanded camp rosters without analogous increases in staff. In another case, a staff member noted they needed additional training and support to manage the needs of individual students while simultaneously managing an expanded group.

6. Prioritize Staff Training and Guidance

Camps are very aware of the need to train and develop their staff to work effectively with youth. Indeed, the skill level among camp staff is a major determinant of camp quality. Training staff is easier said than done, however. In multiple site visits, staff training was brought up as either a source of strength or a source of need. In one program, the entire summer staff had been given a week-long training session covering camp operations and basic SEL responsiveness guidance. They credited some of the success of the camp to this training. Other programs with more specialized student populations, such as those that served students with intellectual or developmental disabilities, implemented SEL curricula that addressed the specific needs of their participants. In contrast, the staff of another camp felt underprepared to manage student needs, especially social-emotional needs, and that they required more training in this area. In general, programs should see staff training as a way to both embed concrete organizational values and procedures, as well as help their workforce be responsive to student needs. Targeted guidance and support from the state on training staff would be helpful — and releasing funds earlier would greatly facilitate hiring and training staff. The state could, for instance, suggest proper staffing ratios and provide relevant training for camp staff. Not all camps are the same, but

certain training could be required as part of the grant.


7. Foster Curiosity Via Student Experiences Inside and Outside Camp

Across multiple site visits, the core idea of summer camps being an opportunity for novel and “special” experiences for campers was an important theme. Elements of the programs in which students were most excited varied widely based on many factors, including camper age, camp context, and program goals. However, students were united by excitement for experiences they would otherwise not have access to. In some cases, students were thrilled to “get a head start” on academic topics they would see during the year or to practice for team sports tryouts. Other students were focused on novel activities they only experienced at camp, such as podcasting, 3-D printing, fishing, and paper quilling. In many cases, field trips and special programming were the most memorable aspects for kids. Most commonly, students were excited for play, especially outdoor physical activities, that they were able to do with their peers. In general, students were excited about camp as a place for new experiences or experiences they could only find there. Summer programs can continue to foster students’ curiosity toward learning by encouraging active and creative play, planning field trips or guest presenters, and integrating academics into fun activities that encourage active participation and engagement from all students.

8. Promote Equity, Diversity, and Cross-Cultural Understanding

Providing children with an educational environment that celebrates racial and cultural differences helps them become more empathetic and informed in a globalized world. Although roughly 60% of campers “always” or “mostly” interacted with campers who were different from them, more



 (Stock Photo)

Recommendations, cont.

than a quarter (28.6%) of students indicated that camp activities seldom or never exposed them to other cultures. The Summer Enrichment Program can ensure that camps attend to this by having applicants describe their planned activities promoting diversity and cross-cultural awareness.

9. Consider Tailoring Summer Programming for High School Students

Nearly half (45.3%) of the students surveyed at the summer programs were entering primary grades, while only 8.5% were in high school. The relatively low participation rates are unsurprising, as many teens may need or wish to work during the summer. Many are also asked to watch over family members, such as younger siblings. Nevertheless, it may be worth discussing ways to reach older students. For instance, camps could offer flexible schedules or payment options (e.g., daily punch cards).

10. Offer Summer Enrichment Staff “Fall Summit”

Feedback from staff revealed that many programs encountered similar challenges. For instance, how can camps serve children faced with social-emotional issues? How do camps best handle staff shortages? How can camps support families with transportation needs? A wealth of knowledge lies in camp staff from across the state. Creating opportunities for practitioners to share best practices and engage in thoughtful dialogue on common problems of practice is an effective form of professional learning. In some cases, challenging topics may be best informed by outside specialists. The state could consider hosting a summit where grant alumni come together to tackle their most pressing challenges.

11. Examine Effects of District-Camp Partnerships on Student Outcomes

We have observed summer programs that maintain strong linkages with nearby schools. For instance, one school identifies students who struggle academically and/or social-emotionally and works to connect their families with a partnering camp. The students participate in academic enrichment in the morning and join the other parts of the camp in the afternoon. Some camps target their recruitment to low-income families; doing so in partnership with schools that know their students well can potentially better channel resources to students and families most in need. We propose to study such models in a district (or districts) that set aside funding to support targeted and strategic recruiting of low-income students for summer programs who may experience chronic absence in school or who are otherwise at risk. A recruitment effort offering a fee waiver and transportation, paired with provision of specific summer program



 (Stock Photo)

elements (i.e., a common set of best practices), sets the stage for a quasi-experimental design that would serve as a “proof of concept” for the efficacy of such school-camp partnership models. For example, using a regression discontinuity design, students enrolled in the program could be compared to non-enrolled but closely matched students on school attendance and Devereux Student Strengths Assessment (DESSA) scores.

12. Strengthen or Expand Causal Research Designs

We encourage the continued use of matched-control designs to study the effects of camp participation on school outcome measures such as student attendance and student well-being. We also suggest exploring other causal designs. For instance, instead of matching campers to non-campers (i.e., matched controls), the effects of camps could be assessed more directly using campers as their own controls. That is, campers could be assessed before and after attending camp using established social and behavior measures. Finally, to improve upon the ability to statistically control for exogenous factors (i.e., factors that may influence student outcomes beyond the treatment) we recommend collecting targeted sources of information on children who attend summer camps — for example, gathering new data on camper households to identify characteristics that improve our ability to use strong quasi-experimental approaches (e.g., highest education level).

Full Report

INTRODUCTION

The Connecticut State Department of Education (CSDE) launched its Summer Enrichment Program in Spring 2021 to provide Connecticut students opportunities for socialization and fun as the state eased its COVID pandemic restrictions and prepared to return to in-person school in Fall 2021. In 2022, recognizing that students and families across the state continued to feel the effects of the pandemic, and given the successes of the inaugural initiative, the CSDE continued the Summer Enrichment initiative. Organizations delivering high-quality, affordable, and accessible summer programming for students across the state were invited to apply for either an Expansion Grant (up to \$75,000) or an Innovation Grant (between \$75,000 and \$250,000). The summer programs are intended to provide an outlet for students to continue to nurture their academic and social-emotional development. Camps may use the funds to expand the number of students served, add support services or activities, and provide scholarships to low-income families (CSDE, n.d).

The CSDE had planned on distributing \$8 million to camps as it had in 2021, but this year attracted such a large and competitive applicant pool that the CSDE supplemented their COVID federal relief funds with another \$4 million – for a total of \$12 million dispersed to camps in 2022. The CSDE awarded 18 Innovation and 182 Expansion grants to a total of 200 summer camps.

EVALUATION DESIGN AND METHODS

The Center for Connecticut Education Research Collaboration (CCERC)¹⁰ commissioned an evaluation study of the 2022 Summer Enrichment Program. Our evaluation sought to assess the degree to which the Summer Enrichment Program achieved its desired objectives. Program goals included (a) expanding or creating

¹⁰ portal.ct.gov/SDE/Performance/CCERC

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opportunities for children to participate in high-quality summer programming; (b) adopting a community-wide approach to planning and delivering such programming; (c) addressing students' academic, social, and emotional needs, particularly in light of the post-pandemic context; and (d) prioritizing serving marginalized student populations.

The evaluation was designed to learn how camps used grant funds to expand access and enhance student experiences. We also sought to identify key challenges and successes. In addition, the evaluation set out to estimate the impact of camp participation on student engagement in school. Finally, given the initiative's emphasis on serving historically marginalized students, the evaluation also explored the camps' commitment to social justice and equity.

The evaluation used a concurrent mixed-methods design and was based on several sources of data. A major component included comprehensive site visits to 11 camps. Evaluation team members observed camp activities during the visits and took extensive field notes. In addition, evaluators facilitated focus group interviews with students and staff at each site. Another major data source included a student survey, which was administered to a sample of 23 camps and completed by 1,336 students. We also surveyed 172 site supervisors.¹¹ The survey solicited information on various topics, including camp enrollment, activities, challenges, and successes. Additionally, we conducted short check-in visits at another 36 camps. Lastly, we utilized student-level state administrative data sets, coupled with camp data, to estimate the effect of camp participation on school attendance in the following year.

Quantitative Instruments & Data Collection

Site Supervisor Survey

We made modest revisions to the online site supervisor survey used in the 2021

evaluation. We wished to retain most items to allow for comparisons over time. The 31-item survey was developed in collaboration with CSDE program personnel. The survey includes closed and open-ended questions and aims to gather summative information on student enrollment and attendance; financial expenditures; self-assessments of various camp activities; camp successes and challenges; and staff preparation. As in the prior year, the data from the survey served as each site's final report to the CSDE.

In Fall 2022, we emailed the link to the survey to site supervisors overseeing all 200 camps receiving Summer Enrichment funds. Follow-up emails were made to ensure receipt and ultimate completion of the survey. Information for 175 of the camps was completed by site supervisors, with 14/18 (77.8%) Innovation and 161/182 (88.5%) Expansion grantees submitting their completed survey.

Student Survey

A student survey was developed for Summer Enrichment students in grades 3 through 12. The questionnaire was largely based on the survey instrument used in the prior year. The final 29-item survey collected demographic information and asked campers about their camp experiences (e.g., how much fun they had, which activities they liked most, and their overall rating of the camp). Additionally, campers were asked about their interactions with other campers, exposure to different cultures, and their level of excitement for returning to school in the fall.

A total of 55 camps were selected to participate in the student survey: all 18 Innovation grantees and a random sample of roughly 20% of the 182 Expansion sites. Site supervisors were contacted via email requesting that they distribute the survey to students at their program during the two-week window between August 1 and 12, 2022. The email included a link to an electronic Qualtrics survey

for students to take anonymously. Site supervisors who requested print copies were appropriately accommodated. Due to the large number of sites and varying camp schedules, site supervisors were relied upon to determine the best time for students to complete the survey. Of the 55 camps invited to participate in the student survey, 23 did so for a camp response rate of 42%.¹² Breaking down

camp response rates by grant type, 39% (7/18) of the Innovation camps and 43% (16/37) of the Expansion camps participated in the survey. The average number of students per site who took the survey was 58; camp participants ranged from a low of 4 to a high of 220 students.

Survey Participants

In total, 1,336 students completed the student survey. Most surveys (91%)

were completed online. The online and print survey data were merged into a spreadsheet for analysis. Because the survey was given to a sample of camps (some that enrolled a different group of students each week), excluded students below grade three, and was designed to prioritize student anonymity, response rates for each camp cannot be determined. Therefore, our sample of

Table 1. Self-Reported Grade Levels Among Survey Responders (n=1,231).

Grade Level	Frequency	Percent	Valid Percent	Cumulative Percent
3rd	150	11.2	12.2	12.2
4th	228	17.1	18.5	30.7
5th	227	17.0	18.4	49.1
6th	284	21.3	23.1	72.2
7th	110	8.2	8.9	81.2
8th	74	5.5	6.0	87.2
9th	48	3.6	3.9	91.1
10th	33	2.5	2.7	93.7
11th	15	1.1	1.2	95.0
12th	18	1.3	1.5	96.4
Other:	44	3.3	3.6	100.0
Total	1,231	92.1	100.0	
Missing	105	7.9		
Total	1,336	100.0		

¹² Camps participating: Camp BGC, Asylum Hill Boys & Girls Club, Camp Simmons, Walsh Intermediate School Parks & Recreation Summer Camps, Ponus Ridge Middle School and Roton Middle School (Norwalk Public Schools - NPS), Pathways/Senderos Center, Jericho Summer Learning Program, Rec Center Camp, YMCA Camp Ingersoll, Roodner Court Learning Center, Echlin Center, Quinnipiac University, Mount Carmel Campus, Camp Naciwonki, Stepping Stones Museum for Children, Watertown High School, Naugatuck YMCA School's Out Western School, Stamford YMCA, CREC Greater Hartford Academy of the Arts, June Norcross Webster, Colt Park, Farmington High School/Hill-Stead Museum, Horizons at Sacred Heart University (HSU), Valley Shore YMCA, Inc, Shepard Hill Elementary School.

responses does not necessarily represent all students who attended camps in the summer of 2022. Nonetheless, we obtained a large sample of students to generalize about the larger summer camp population. Given that more than two-thirds of the students in our sample participated in their camp for three or more weeks (refer to Table 4), we have reasonable confidence in their accounting of the camp experience.

Nearly half (49.1%) of the students attending the summer programs were entering primary grades (Table 1), while only 8.9% were in high school. The grade level representing the highest percentage (23.1%) of campers was those entering grade six.

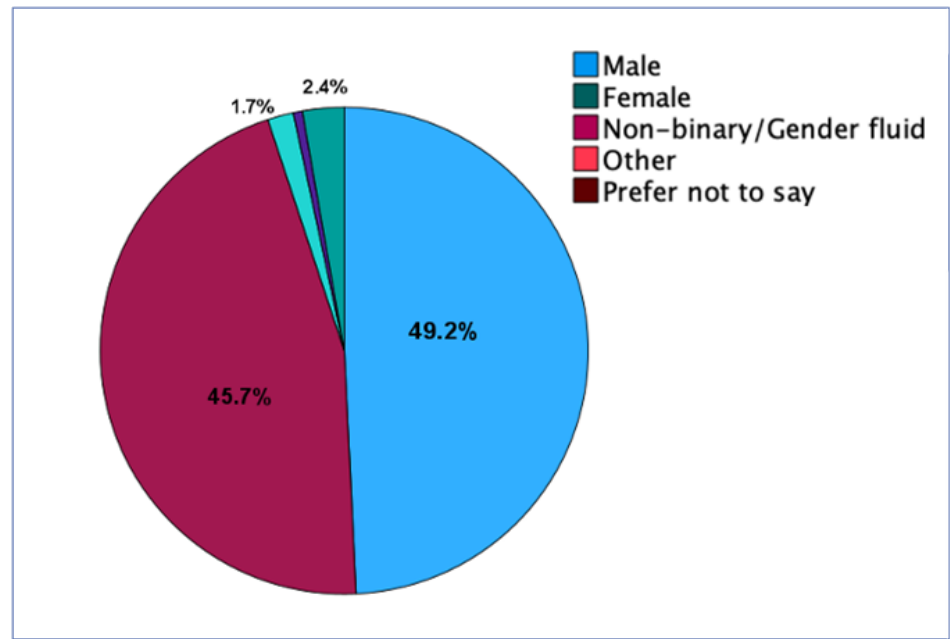
The sample of students that completed the survey included 572 male students, 531 female students, 20 nonbinary/gender-fluid students, and 7 students who identified as other (Figure 1). Approximately 15% of the students preferred not to say or did not answer the gender question.

In addition to gender, students also self-reported their race/ethnicity on the survey. Because we do not have data for this item for 42.4% of our sample, we caution against making inferences about the racial identity of the sample. Of the 1,336 respondents, 26.3% chose the response “prefer not to say,” and another 16.1% did not provide an answer. That said, of the 57.6% who did respond, nearly one-third (32.2%) of campers answered that they were of Hispanic/Latino origin, 4.3% identified as Asian, 20.4% as Black, 1.5% as Native American, 1.1% as Native Hawaiian or Pacific Islander, and 30.2% as White.

Student-Level Data for Impact Analysis

The CSDE required all sites to submit an end-of-program student intake form. Site supervisors assembled data on each camper, such as full name, date of birth, resident town, demographic information,

Figure 1. Self-Reported Gender of Survey Respondents.



and the state-assigned student identifier (SASID), if known. In addition, they estimated the number of “exposure days” at camp for each student. One exposure day would be the equivalent of attending a full day at camp (e.g., roughly 9:00 am to 5:00 pm). This information was submitted to the CSDE in spreadsheet form. Most sites, but not quite all, were able to estimate exposure days or submit data for all their campers.

Using a combination of variables from the intake data, the CSDE matched over 80% of the campers to the state administrative data sets.^{13, 14} The CSDE regularly collects administrative data on Connecticut’s roughly 450,000 public school students. We had access to specific student-level data that would contribute to the analysis, such as SASID, home school district, free and reduced-priced status, EL status, special education status, and state test scores. After filtering students in grades 3-8, which represent popular camp age levels, we had approximately 220,000 students – including the nearly 13,000 campers for whom we had data in all relevant fields. This group of campers

represented our treatment population. The remaining group of over 200,000 students served as the control group population. Note that among the control group, we had no way of knowing whether students attended a camp outside of the Summer Enrichment-funded camps.

Data Analysis

Student and Site Supervisor Surveys

Quantitative data from the two surveys were analyzed descriptively, such as generating average scores and frequency distributions for items. Bivariate analyses were used where relevant and appropriate. Open-ended survey items were subjected to content analysis and summarized thematically.

Impact Analysis

We employed statistical models to estimate the effect of summer camp participation on student attendance in school.^{15,16} We considered Summer Enrichment camp participation (the treatment) at two levels. The first level was defined as any camper attending at

13 Some of the un-matchable cases were students from out of state or who attended private schools, while others were due to data quality issues (e.g., missing, or incorrect name/date of birth).

14 We wish to thank Dr. Briana Hennessy for assembling this large dataset.

15 We wish to thank Drs. Timothy Moore, Jung Lee, and Briana Hennessy for their statistical consultations.

16 As previously noted, students in the control group may have gone to a summer camp not funded by the Summer Enrichment initiative. This possibility could attenuate the estimated impact of the CSDE-funded camp treatment.

least one camp day (n=12,776 students in grades 3-8). Secondly, because we wanted to know if a larger treatment “dosage” made a difference,¹⁷ we assigned students who went to camp for at least 20 days as a second form of participation (n=5,706). Student attendance was defined in two ways as well. The attendance rate was generated for each student by dividing the total days they attended school by the number of membership days. (For instance, a student who went to school for 168 of a possible 172 days yielded an attendance rate of 97.7%.) We also removed students who had less than 150 membership days; we chose this threshold to eliminate spurious candidates. The second attendance variable was chronic attendance, as defined by the CSDE. Students who were absent for 10% of the time were flagged as “chronically absent.” All other students with an attendance rate above 90% were not considered chronically absent.

We modeled the data in several ways. Because students were not randomly assigned to treatment and control groups, we attempted to identify a matched group of students who shared similar characteristics based on available data. In other words, we required the same variables for camp-goers and our potential control group of non-camp-goers. Thus, we first attempted propensity score matching to identify treatment and control groups. However, the predictor variables at our disposal did not predict students in the treatment group (i.e., summer camp participants) with sufficient accuracy. We also tried a case-control matching technique that manually matches camp and non-camp students on observable variables, such as gender, race/ethnicity, free and reduced-price lunch status, EL status, special education status, math proficiency score, and prior attendance. Matches were effectively made; however, we discovered that the treatment group of campers exhibited a selection bias in that they had a higher average prior-year attendance rate compared to the control group of non-camp-

ers. Although we could adjust and match on prior attendance rate with a small degree of fuzziness (i.e., +/- 1.11%), we were not satisfied with the percentage of successful matches. Instead, we employed a conventional covariate-adjustment approach and fitted models with multiple predictors of chronic absenteeism.

Qualitative Data Collection & Analysis

The primary qualitative data sources were derived from extensive site visits to camps across Connecticut. The evaluation team conducted site visits at a total of 47 Summer Enrichment programs in July and August of 2022. Eleven of these included comprehensive half-day site visits, while another 36 were shorter check-in visits. We also analyzed open-ended responses to survey items to surface key trends and themes.

Comprehensive Site Visits

The evaluation team visited eleven camp locations across the state, chosen based on a random selection of camps receiving either Expansion or Innovation grants. The camps represented a wide range of program duration, focal themes, and ages of students served by Innovation Grantees. The camps visited included those focused on STEM, arts, purposeful play, sports, social-emotional well-being, life skills, and college and career readiness.

Check-In Site Visits

In addition to the comprehensive site visits noted above, we conducted brief informal monitoring visits at 36 grantee sites from the 37 sites that were initially selected. Roughly half the sites were identified by the CSDE, prioritizing those sites without an OEC license, and the evaluation team randomly selected the other half from the remaining Expansion grantees. One Innovation grantee was included among the 36 programs visited. An evaluation team member contacted coordinators at these sites to make arrangements for the visit; one Expansion site was unavailable. The

visits occurred in July and August and included informal observations of camp activities, oftentimes a camp tour, and brief conversations with the site coordinator or designee. Each site visit was summarized with field notes.

Data Collection

The comprehensive site visits occurred between July 27 and August 5, 2022. All were conducted in person at the camp locations. During site visits, a member of the evaluation team conducted one or more student focus group interviews with approximately three to five students at a time. Students were identified by site supervisors and left their scheduled activities for between fifteen and thirty minutes to participate in the focus groups. The evaluation team requested that these groups be generally demographically representative of the student body of each site. In focus group interviews, students were asked about their engagement and enjoyment of camp activities; their interactions with other students and staff; the connection of camp activities to school; and how they felt their camps helped them handle interpersonal and social justice-related issues. Team members also conducted focus group interviews with three to four staff members at each site. Staff interviews focused on how grant money had been used, what activities and additions had been particularly effective, student engagement, challenges, COVID-related issues, and how they focused on social-emotional well-being and social justice concerns within the camp. Evaluation team members met with 76 students and 45 staff members across all focus groups.

In addition, during each visit, the evaluation team members were given time to observe camp facilities and activities. These observations combined guided tours from camp staff and individual observation. During the visits, team members were able to observe and note the structure of the programs, general engagement of students, staff behavior, resource availability, and general camp

17 There is some evidence that suggests 20 days of engagement is a threshold that brings about effects on student outcomes. However, this is based on only one study that examined the effect of summer learning programs on academic outcomes: Augustine, C. H., McCombs, J. S., Pane, J. F., Schwartz, H. L., Schweig, J., McEachin, A., & Siler-Evans, K. (2016). Learning from Summer: Effects of Voluntary Summer Learning Programs on Low-Income Urban Youth. RAND Summer Learning Series. Research Report. RAND Corporation.

structure. Evaluators took extensive field notes during the visits.

Data Analysis

Analysis of site visit data occurred over several stages. After each site visit, team members drafted site memos drawing from the observation and interview protocols to present a complete picture of each camp as it pertained to the evaluation goals. Recordings of focus group interviews were cross-referenced with written field notes to ensure accuracy. Two team members jointly analyzed these memos to address evaluation study questions, consulting with the team member(s) responsible for generating each site memo for clarification. The information from the memos was processed to examine main themes and information across all camps based on the evaluation goals, including student engagement; successes; challenges; facilities; student staff dynamics; social-emotional well-being; and social justice. The thematic coding underwent multiple revisions with consultation from all interviewing team members.

FINDINGS

Students Served By Summer Enrichment Camps

Student Enrollment

Supervisors reported the number of students enrolled in camps on the site supervisor survey. Determining precise enrollments is an elusive task given the different types of camp schedules. Some camps operated on a rotating schedule – for example, one or two-week periods – while others spanned longer stretches. Camps may also serve a different group of students each rotation. In 2022, the median number of students served by camps reporting was 149.

Sites reported on their grant applications the total number of programming hours,¹⁸ which ranged between 32 and 1,000 hours, with an average of around 325 hours. Also, enrollments do not account for student camp “exposure,”

given the range of daily schedules across sites. While most camps operated during the day (8 am to 5 pm), others ran 8 am to 8 pm (n=44), while a smaller number (n=11) ran overnight or in the afternoon or evening only (n=6).

The aggregate 2022 student enrollment across the 171 camps reporting was 46,674.¹⁹ The survey also asked site supervisors to enter enrollments from the previous summer if their camps operated. Table 2 shows year-over-year differences in enrollment among the camps that reported their enrollments for 2022 and 2021. Total 2022 enrollment was 27.4% higher than the previous year (41,790 vs. 32,814 students). The average increase per camp was 49 students (13%). Of the 145 camps in this group, 122 camps (84%) exhibited an increase in enrollment (an average increase of 79 students), 18 camps reported a decrease in enrollment (an average reduction of 39 students), and 5 camps had no change.

Although Table 2 compares enrollments from one year to the next, the state Summer Enrichment Program also changed funding parameters, increasing the maximum award for Expansion grantees from \$25,000 to \$75,000. The increase in maximum award per camp, along with a lower number of Innovation awardees in 2022, led to an overall decrease in the number of camps awarded in 2022 (i.e., 210 Expansion and 25 Innovation in 2021 compared to 182 and 18 Innovation

in 2022).

Site supervisors were asked to indicate what they had projected for 2022 enrollment. Based on their reporting, actual enrollments were, on average, 5.2% higher than projected. One explanation for the increases in student enrollment is the scholarships and fee waivers made available by Summer Enrichment funds. Seven out of ten (69.7%) site supervisors reported using their Summer Enrichment grant funds to support student scholarships or fee waivers.

Site supervisors were also asked about the number of students who received scholarships or fee waivers (regardless of funding source). Table 3 presents the grouped frequency distribution of students reported to be on some form of scholarship or fee reduction. Figure 2 graphically portrays the distribution in Table 3. The distribution in Figure 2 is generally bimodal, with large clusters on either end. For instance, 43.0% of camps reported that between 0% and 20% of their students were on a scholarship or fee waiver (11.4% were not on any scholarships). On the other end of the distribution, 20.3% of camps had 100% of their students on some form of scholarship. On average, 41.1% of students were on a scholarship or received a fee waiver to attend summer camp; the median percentage was 26.4%. Note that this survey question was asked regardless of the source of those funds. As a point of comparison, in 2021, 38.9% of

Table 2. Student Enrollment for Sites Reporting Data for 2021 and 2022 (n=145). (Source: 2022 Site Supervisor Survey)

	2021	2022 ²⁰	Difference
Total enrollment	32,814	41,790	+8,976 (27.4%)
Median camp enrollment	120	160	+40 (33.3%)
Average camp enrollment	226	288	+62 (27.4%)

18 For example, 4 weeks of programming for 5 days a week for 8 hours a day equals 160 total hours.

19 A handful of camps did not report 2022 enrollment figures on the site supervisor survey.

20 There is a discrepancy in the number reported via the evaluation site supervisor survey (41,790) and student intake data collected by site supervisors on behalf of the state (37,124). There are likely many explanations for the difference, but we are uncertain of the exact source.

Table 3. Percentage of Students on Scholarship/Fee Waiver as Reported by Site Supervisors (n=160).

	Frequency	Percent	Valid Percent	Cumulative Percent
0%	18	10.3	11.4	11.4
1 to 10%	26	14.9	16.5	27.8
11 to 20%	24	13.7	15.2	43.0
21 to 30%	20	11.4	12.7	55.7
31 to 40%	8	4.6	5.1	60.8
41 to 50%	7	4.0	4.4	65.2
51 to 60%	6	3.4	3.8	69.0
61 to 70%	5	2.9	3.2	72.2
71 to 80%	6	3.4	3.8	75.9
81 to 90%	2	1.1	1.3	77.2
91 to 99%	4	2.3	2.5	79.7
100%	32	18.3	20.3	100.0
Total	158	90.3	100.0	
Missing	17	9.7		
Total	175	100.0		

camps reported that 100% of their students were on some form of scholarship; 29.3% said between 0% and 20% were on scholarship; and 4.8% were not on any scholarship. On average, there was a decrease compared to last year in terms of the percentage of students receiving scholarships or fee waivers – 55.7% in 2021 vs. 41.1% in 2022.²¹ However, the median number of students on some scholarship was the same for both years at 26.4%.

Student Attendance

Site supervisors were asked to estimate weekly attendance levels among their campers. They reported that 62.9% of students attended between 90% and 100% of the time (Table 4). Another 24.1% attended between 80% and 90% of the time. Table 5 presents reasons why campers missed attendance, as reported by site supervisors. As indicated by 61.7% of supervisors, the top two reasons were family vacations and COVID-related dis-

ruptions. Transportation also seemed to affect over a quarter (27.4%) of students. Family funds did not appear to be heavily related to missed attendance, with only 7.4% of supervisors believing this to be the case.

How Camps Used Grant Funds

Site supervisors were asked whether their grant funds were used to create new student activities, hire more staff,

²¹ These figures represent the unweighted average across camps (i.e., the average percentage of campers on scholarship as reported by site supervisors).

purchase additional materials, train staff, offer scholarships, and support field trips. They also had the option to write in any other major uses of funds. Survey results show that three-quarters of the camps used the funds to hire more staff and buy additional materials (Table 6). Roughly 7 of 10 camps (69.7%) used funds to underwrite new student activities and scholarships.^{22, 23} Lastly, about half the camps (51.4%) used funds to support field trips, while 44.6% spent funds on staff training.

Activities Camps Offered

The summer camps were diverse regarding their focus and age range of students served. Site supervisors were asked about the types of activities their camps offered. Table 7 displays the overall results. Responses suggest that camps relied heavily on outdoor activities, with 75.0% reporting using outdoor activities “a lot” (Table 7). Arts and crafts and sports were also a large part of many of the camps, with 71.3% and 58.4% reporting using them “a lot,” respectively. Learning activities, such as developing skills in reading or math, were employed “a lot” by 43.9% of camp supervisors and “a moderate amount” by another 24.6%. Two-thirds of camps (67.3%) offered field trips “a lot” or “a moderate amount.”

Students’ Camp Experiences

A primary objective of the Summer Enrichment Program is to offer enjoyable and enriching activities to Connecticut students, fostering their social, emotional, and physical well-being. Evidence drawn from student surveys and on-site evaluations indicates the successful realization of this objective. An overwhelming majority of students gave their camps exceptionally high ratings, expressing a positive outlook on both the camp environment and the activities. The following sections delve into the various aspects of students’ camp experiences.

Recruitment and Participation

When the student survey was adminis-

22 Site supervisors were asked about students on scholarship/fee waivers in two different ways on the survey. One question asked specifically if Summer Enrichment funds were used to support scholarships or fee waivers (noted here) while another question asked more globally to estimate how many students received such support, regardless of funding source.

23 Notably, this was a substantial increase from the previous year where 23.7% indicated using for student scholarships.

Figure 2. Grouped Frequency Distribution: Percentage of Students on Scholarship/Fee Waiver

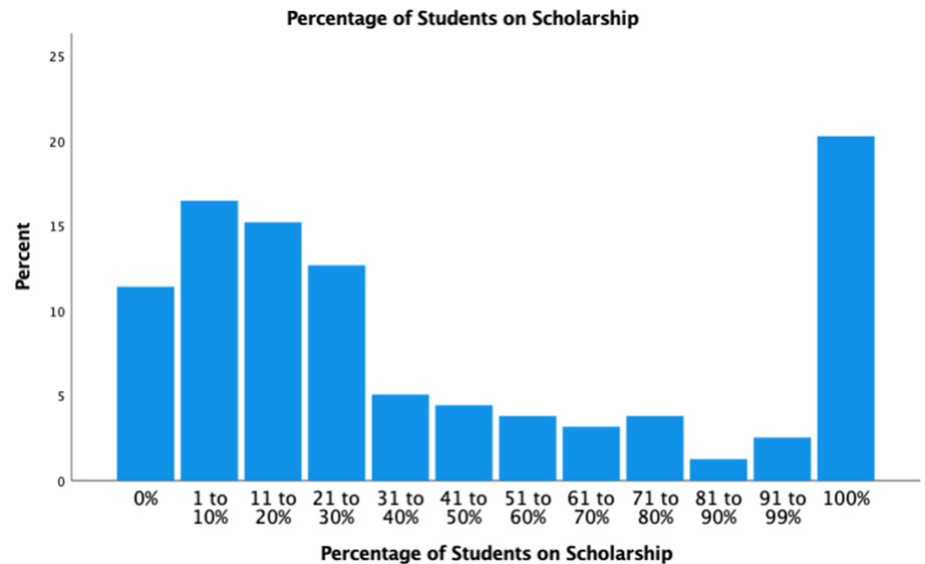


Table 4. Estimated Weekly Attendance Among Students as Reported by Site Supervisors (n=175).

Est. Camp Attendance	Frequency	Percent	Valid Percent	Cumulative Percent
90%-100%	107	61.1	62.9	62.9
80%-90%	41	23.4	24.1	87.1
70%-80%	16	9.1	9.4	96.5
60%-70%	6	3.4	3.5	100.0
Total	170	97.1	100.0	
Missing	5	2.9		
Total	175	100.0		

tered in early August, half of the students indicated they had attended their camp for five or more weeks (Table 8). The survey also asked if campers had participated in a summer program before this summer. Nearly 73% of respondents

(72.5%) had previously attended a summer program (Table 9). For 27.5% of students, the summer of 2022 was the first time they attended a summer program. Examining this distribution disaggregated by grade level revealed that 3rd graders (30.5%) were slightly more likely to

Table 5. Reasons for Missing Camp as Reported by Site Supervisors (n=175).

Reason	Number	Percent
Transportation	48	27.4
Family funds	13	7.4
Family work obligations	38	21.7
Student work obligations	3	1.7
Family vacations	108	61.7
COVID-related	108	61.7
Unknown reasons	66	37.7
Other: Sickness (non-COVID)	19	10.9
Total	175	

Table 6. Use of Grant Funds as Reported by Site Supervisors (n=175).

Used For	Number	Percent
Purchasing additional materials	133	76.0
Hiring more staff	132	75.4
New student activities	125	71.4
Scholarships/Fee waivers	122	69.7
Field trips	90	51.4
Staff training	78	44.6
Other: Transportation	16	9.1
Other: Food/Snacks	13	7.4

Table 7. Summer Program Activities as Reported by Site Supervisors (n=175).

Please indicate the extent to which these activities were part of your summer program.

Used For	% A lot	% A moderate amount	% A little	% None at all
Outdoor activities	75.0	20.8	3.6	0.6
Arts & Crafts	71.3	22.8	2.9	2.9
Sports	58.4	32.5	6.0	3.0
Learning (e.g., math, reading)	43.9	24.6	27.5	4.1
Field Trips	27.4	39.9	9.5	23.2
Acting, Music, or Dance	26.5	35.9	28.2	9.4
Computer or Technology	16.6	24.3	34.3	24.9
Free Time	10.6	47.1	38.8	3.5

Table 8. How Long Students Attended Camp at Time of Survey (n=1,213).

About how many weeks have you been at this summer program so far?

	Frequency	Percent	Valid Percent	Cumulative Percent
1-2 weeks	297	22.2	24.5	24.5
3-4 weeks	310	23.2	25.6	50.0
5+ weeks	606	45.4	50.0	100.0
Total	1,213	90.8	100.0	
Missing	123	9.2		
Total	1,336	100.0		

have been first-timer than the average. A higher percentage, although representing small numbers, of 10th, 11th, and 12th-grade students also were first-timers (10, 11, and 14 students, respectively).

Students were also asked to select from a list of options about how they learned about the summer program. Nearly 42% of students learned about the summer program from their families (Table 10). Less frequent forms of recruitment for summer programs included participants' friends (16.6%), school systems (13.1%), and invitations directly from the summer program (8.2%). Fourteen percent (14.1%) of the students did not know or remember how they learned about the camp. Other write-in entries included repeat campers (they attended a prior year) or learning from agencies such as the Boys and Girls Club, YMCA, and afterschool programs.

Student Perceptions of the Camp Experience

A goal of the Summer Enrichment Program was to support programs that could provide an outlet for many students to nurture their social-emotional development and bring joy into their lives. The student survey asked three questions to assess students' level of enjoyment with their camp. More than 7 out of 10 students (71.3%) had "a lot" of fun while attending their summer program (Table 11). Not even 1% stated that they had no fun. Nearly forty percent (38.1%) of the students rated their summer program a 10 out of 10, with 10 being the best camp they have attended, and another 38.7% rated their summer program an 8 or 9 (Figure 3). Lastly, 72.8% of students said they would attend their camp next summer if they could, another 23.2% might attend, and only 3.9% would not (Table 12).

Providing children with an educational environment that celebrates racial and cultural differences helps them to become more empathetic humans and productive citizens of the global society (Banks, 2008).²⁴ Although roughly 72% of campers always or mostly interacted

²⁴ Banks, J. A. (2008). Diversity, group identity, and citizenship education in a global age. *Educational Researcher*, 37(3), 129-139.

Table 9. First-Time and Repeat Attendees at Summer Camps (n=1,231).

Was this your first summer going to a camp?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes, this was my first time at any summer camp	339	25.4	27.5	27.5
No, I've been to a camp in a previous summer	892	66.8	72.5	100.0
Total	1,231	92.1	100.0	
Missing	105	7.9		
Total	1,336	100.0		

Table 10. How Students Learned About Their Summer Program (n=1,336).

How did you learn about this summer program? (Check any that apply)	Number	Percent
My family	560	41.9
My friends	222	16.6
My school	175	13.1
The summer program invited me	109	8.2
Other	143	10.7
I don't know or don't remember	188	14.1

Table 11. Student Enjoyment Rating of Camp (n=1,204).

How much fun did you have at the summer program?

	Frequency	Percent	Valid Percent	Cumulative Percent
A lot	858	64.2	71.3	71.3
Some	295	22.1	24.5	95.8
A little	42	3.1	3.5	99.3
None	9	.7	.7	100.0
Total	1,204	90.1	100.0	
Missing	132	9.9		
Total	1,336	100.0		

Figure 3. Student Ratings of Camp (n=1,206).

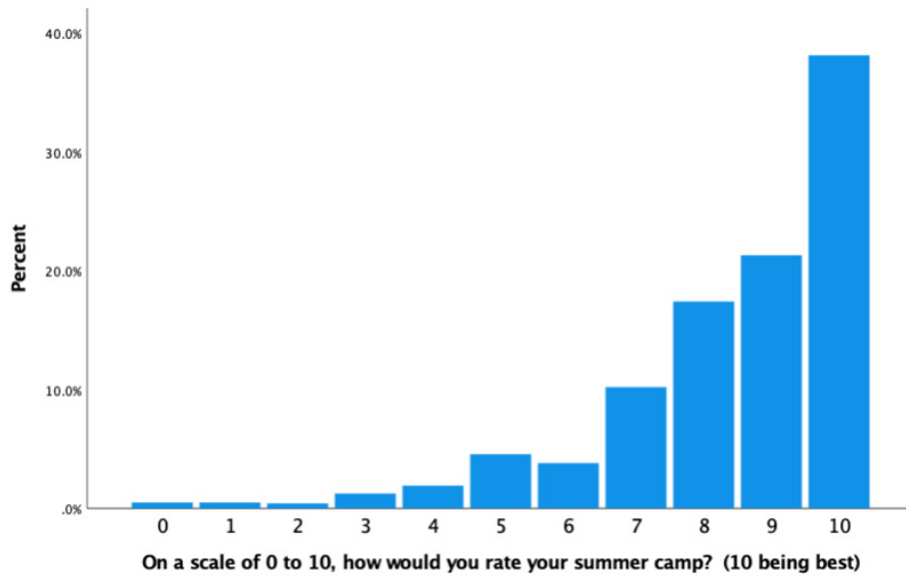


Table 12. Student Possibility of Returning Next Summer (n=1,197).

If you could come to this summer program again next summer, would you?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	872	65.3	72.8	72.8
Maybe	278	20.8	23.2	96.1
No	47	3.5	3.9	100.0
Total	1,197	89.6	100.0	
Missing	139	10.4		
Total	1,336	100.0		

with campers who were different from them (Table 13), more than a third (34.2%) of students indicated that camp activities seldom or never exposed them to other cultures. Approximately 81% of students indicated that adults at camp stepped in when students had problems. Finally, the data suggest that students did not find camp rules overly strict and felt they were given opportunities to make their own choices.

Students were asked how much they liked certain aspects of the summer program they attended. The four features that most students liked “a lot” were the *field trips; counselors, teachers, and adults; free time; and outdoor activities* (Table 14). *Sports, computer and*

technology activities, and food/snack/drink were liked but to a lesser degree. Finally, for camps offering *learning activities*, one-quarter of students did not like them “very much” – although 75.0% liked them either “a lot” or “somewhat.” Note that not all camps offered every activity listed in Tables 7 and 14. More than a third (37.1%) of the camps did not offer *learning activities* (math, reading, or science), almost half (46.4%) did not offer *computer/technology activities*, and 28.9% did not offer *field trips*.

Figure 4 is a bar chart that summarizes students’ responses to the question: *If you could change something about the summer program, what would it be?* Given the open-ended nature of

the question, similar responses were combined into discrete categories. The graphic provides a visual display of the most (and least) prominent response categories, signified by the size of each box. *Nothing* was the most common answer (19.5%), followed by *more free time* (13.3%), and *food* (11.2%). Combining the categories *kids* (9.2%), *nicer people* (3.1%), and *better groups* (2.3%) suggested, in some manner, that 14.6% of students felt social interactions could be improved. This is consistent with student responses to the statement, “students are nice to each other” (shown in Table 13), where 23.2% indicated “sometimes,” 8.1% “once in a while,” and 2.3% “never.” For the 76 (7.5%) students who listed

Table 13. Student Perceptions of Camp Climate.

At your summer program...	Always	Mostly	Sometimes	Once in a While	Never	N
Students were nice to each other.	18.8%	47.7%	23.2%	8.1%	2.3%	1,140
I learned new things.	32.1%	28.6%	22.5%	12.0%	4.8%	1,137
I interacted with campers who were different than me (such as culture, ability, identity, etc.).	42.1%	29.8%	18.1%	7.0%	2.9%	1,125
Activities exposed me to different cultures.	21.6%	19.7%	24.5%	16.9%	17.3%	1,119
When students had problems, adults stepped in to help.	56.0%	24.8%	12.1%	5.2%	1.9%	1,145
Kids were given lots of choices.	32.5%	32.2%	23.8%	9.0%	2.6%	1,132
The rules were too strict.	7.2%	7.7%	20.7%	27.9%	36.5%	1,129

Table 14. Student Ratings of Camp Activities/Characteristics.

Activity	Percent				N
	A lot!	Somewhat	Not very much	Not part of camp	
How much did you like these parts of the summer program?²⁵					
Field Trips	80.7	16.5	2.8	28.9	806
Counselors, Teachers, and Adults	77.3	20.0	2.6	0.7	1,129
Free Time	74.3	20.9	4.8	6.5	1,062
Outdoor activities	68.4	25.9	5.7	5.4	1,068
Sports	63.8	24.0	12.3	7.9	1,044
Computer or Technology activities	58.2	30.8	11.0	46.4	595
Food, Drink, and Snacks	55.3	37.6	7.1	7.5	1,049
Arts & Crafts activities	51.5	34.3	14.2	6.2	1,056
Acting, Music, or Dance activities	40.0	35.8	24.2	38.7	679
Learning activities (math, reading, or science)	32.8	42.2	25.0	37.1	695

²⁵ Student ratings are for only those camps that offered the activity.

Figure 4. Bar Chart of Changes to Camp Students Would Make (n=1,010).

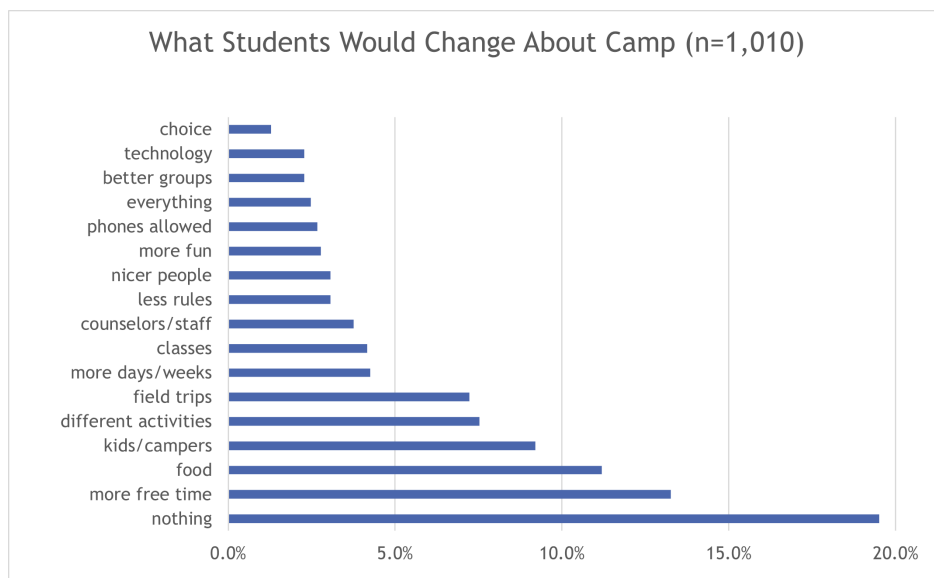


Table 15. Student Excitement for Returning to School (n=1,161).

Has the summer program gotten you excited to go back to school?

	Frequency	Percent	Valid Percent	Cumulative Percent
I'm a lot more excited	260	19.5	22.4	22.4
I'm a little more excited	292	21.9	25.2	47.5
I'm about the same as before	456	34.1	39.3	86.8
I am less excited	153	11.5	13.2	100.0
Total	1,161	86.9	100.0	
Missing	175	13.1		
Total	1,336	100.0		

different activities, “playground” was the most popular item cited.

Another goal of the Summer Enrichment Program was to ensure students were prepared for and enthusiastic about returning to school in the fall. In the survey, students were asked about the extent to which their summer program has gotten them excited to return to school in the fall. A little over a quarter (25.2%) who answered this question said they were “a little more excited,” while another 22.4% said they were “a lot more

excited.” Around 13% claimed to be less excited about returning to school (Table 15).

We explored possible associations between student enjoyment of specific camp activities/features and their excitement in returning to school by generating bivariate correlations (Table 16). The absolute value of the Pearson correlation index speaks to the strength of the relationship; the correlation index ranges between 0.00 and 1.00, with 1.00 being a perfect correlation and 0.00 meaning

no correlation. Correlations in the range of 0.2 and 0.3 are generally considered low in strength, between 0.4 and 0.6 moderate strength, and above 0.6 strong. The “sign” before the correlation score indicates either a positive or inverse relationship. In this case, all correlations are positive (+) and thus are all direct correlations; in other words, as scores on one variable increase, so do scores on the second variable, and vice versa. Although we issue caution when drawing inferences here, as statistical associa-

tions do not imply a causal relationship, the correlations may illuminate whether certain aspects of camp were associated with student excitement for returning to school in the fall. Student perceptions of camp learning activities (e.g., math, reading, or science) were modestly (and directly) correlated with their feelings toward going back to school ($r = .329$). The remaining correlations were also direct (or positive) but weak in strength.

Relationship Between Camp Characteristics and Student Satisfaction

Given the diversity in camp themes (e.g., arts, STEM, purposeful play, et cetera), in order to gain further insight into students' camp experiences, we examined the relationship between students' satisfaction with camp activities or characteristics and overall camp satisfaction. Table 17 below presents bivariate correlations between student ratings of specific camp activities or features and two overall camp satisfaction items. Table 17 shows the strongest correlation was between student perceptions of counselors/teachers/adults at camp (how much they liked them) and how much fun they had at camp ($r = .440$).²⁷ The next largest association was between the overall student ratings of camp and participating in perceptions of counselors/teachers/adults ($r = .410$). Outdoor activities was modestly positively correlated with student camp satisfaction, and to a slightly lesser degree, so did learning activities. The remaining activities did not relate that strongly (although all were in the positive direction) with overall camper satisfaction. These data must be interpreted cautiously as not all camps offered activities like field trips or sports. Again, the observed correlations are all positive in sign, meaning that as scores on one variable increase, so do the scores on the other variable — and vice versa. By rule, correlations do not imply a causal relationship but represent a necessary condition of such relationships. Based on our data, students who expressed positive feelings about camp staff also generally reported having fun

Table 16. Correlations Between Student Perceptions of Camp Characteristics/Activities and Feelings on Returning to School.

Student Ratings of Camp Activities and Characteristics	Has the summer program gotten you excited to go back to school? ²⁶
Learning activities (math, reading, or science)	.329**
Arts & Crafts activities	.182**
Field trips	.170**
Acting, Music, or Dance activities	.167**
Counselors, teachers, and adults	.150**
Outdoor activities	.128**
Computer or Technology activities	.115**
Food, drink, and snacks	.090**
Free time	.073*
Sports	.069*

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

at camp and high camp ratings.

Site Supervisor Perceptions

Our evaluation team administered a 26-item survey to grant site supervisors following the end of the summer camp season. The survey included both multiple-choice and six open-ended items. This section shares the major themes that emerged across the open-ended responses. In these responses, supervisors reflected on the successes and challenges of the 2022 camp season, the impact of their programs on student learning, and their insight on how future Summer Enrichment funding opportunities might facilitate program improvement. Below, we discuss how camps' staffing needs influenced program implementa-

tion, how the Innovation and Expansion grant rollouts shaped camps' abilities to prepare impactful programming, and how summer camp programs shaped student learning across Connecticut.

Staffing

One of the most common themes across all open-ended responses was the need for consistent, reliable staffing. Camps experienced staffing shortages throughout the summer; 46% ($n=68$) of site supervisors named staffing as one of the top challenges they faced during the 2022 camp season. As one supervisor explained, "We couldn't hire enough staff to cover the overflow of children. We staffed for the 100 children we planned on but couldn't cover additional chil-

²⁶ This item is based on Q10 of the student survey. Higher scores on this item essentially indicate *more excited*, lower scores indicate *less excited*.

²⁷ In actuality, the strongest correlation in the table is .629, however this simply demonstrates the concurrent validity between our two overall student satisfaction with camp measures, which is quite strong.

Table 17. Correlations Between Student Perceptions of Camp Characteristics/Activities and Their Overall Satisfaction with Camp.

Camp Activities and Characteristics	On a scale of 0 to 10, how would you rate your summer camp? (10 being best)	How much fun did you have at camp?
Counselors, Teachers, and Adults	.410**	.440**
Outdoor activities	.311**	.356**
Learning activities (math, reading, or science)	.301**	.299**
Arts & Crafts activities	.236**	.220**
Computer or Technology activities	.231**	.226**
Acting, Music, or Dance activities	.230**	.177**
Free Time	.212**	.194**
Field Trips	.181**	.178**
Food, Drink, and Snacks	.168**	.161**
Sports	.141**	.217**
<i>On a scale of 0 to 10, how would you rate camp?</i>	1.00	.629**
<i>How much fun did you have at camp?</i>	.629**	1.00

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

dren who also wanted to join above that amount. The staffing shortage was the worst we have ever had.” Camps that were able to hire enough staff focused on training, developing, and compensating their employees throughout the summer. In addition to supporting general camp staff, 29% of supervisors also named hiring and staff development as something they focused on during the camp season, particularly to support campers’ social-emotional learning (SEL). “Having a behavior support specialist made a difference in our program,” one supervisor explained, “both for the students and the ‘regular’ staff.” Supervisors seemed to agree that increased funding would enable camps to hire, develop, and retain effective staff at their sites.

Timing of the Grant

Nearly half (n=78, 49%) of site supervisors noted the need for earlier grant funding. One supervisor explained, “We can’t hire staff if we don’t know funds will be available to pay them. We also can’t increase enrollment if we don’t have additional hired staff.” Another supervisor highlighted how an earlier grant rollout would allow camps to plan their programming more effectively: “We would have been able to plan better and more events, field trips and enrichment programs but more importantly arranged for busing if we had known we would be receiving the funding in the spring instead of early summer.” As many camps begin their planning for summer programs in the early spring,

applying for the grant program in March and learning about their grant decisions in April would offer camps “plenty of time to plan for an amazing summer,” as another supervisor shared. Receiving funds in early summer puts camp supervisors in situations where they find themselves, “making decisions hoping the dollars will come through,” and often making last-minute changes to their budget or programming in the face of changed funding availability.

Impact on Students’ Academic and Social-Emotional Learning

A major success of the 2022 grant cycle was the academic programming camps were able to offer their students. Forty-one percent of supervisors cited

academic achievement as a program highlight this year. STEM and literacy programs were especially popular. Of the 70 camps that highlighted academic achievement, 30.0% reported quantifiable gains in students' academic learning, often using local assessment measures or the Connecticut math standards to measure learning growth. One site reported that their educational programming helped 83.0% of students improve their reading skills. Another site shared that 97.0% of students reported feeling excited to learn new things after participating in their learning program.

Social-emotional learning was also a popular curricular focus. Of 170 supervisor open-ended responses, 29.4% named SEL achievement and SEL-related staffing (e.g., hiring behavioral specialists, licensed clinical social workers) as a program highlight, and at least 32 supervisors also indicated their plans to build SEL into next year's summer programming. One supervisor explained,

Bar none, the most important thing we saw was that having a mental health counselor on-site is now non-negotiable. Should this grant never be offered again, we know now that building this person's salary into our budget must happen. Kids and staff are in a vastly different place than they were pre-pandemic, and it would be irresponsible to try to meet post-COVID needs with pre-COVID resources alone.

Site supervisors illustrated the ways summer camp programs function as essential safe havens where students can take risks, build important life skills, and have fun within a carefully constructed learning environment. Supervisors recognized the importance of "socialization through the interactions with peers and deeper learning with real-world artifacts," which "helped to accelerate those experiences lost over the last year and a half." One camp reported that intentional SEL programming led to students demonstrating "improvement in attitudes and self-confidence, as evidenced by developmental assets surveys and evaluation." Another witnessed SEL improvement when students were "learning to work together as a group" and "being

able to express themselves and being with their peers in a fun way."

Supervisor Recommendations for Future Grant Implementation

The site supervisor survey included eight open-ended response items. Questions asked supervisors to reflect on the successes and challenges their programs faced in 2022 and how their Innovation or Expansion grant contributed to their summer programming. The survey also addressed how each camp amplified student participation and engagement, the impact of COVID on supervisors' sites, potential reasons for missed attendance, and how the grants would impact the camps' future program plans. They were also asked to provide recommendations for improving the Summer Enrichment grant experience.

Site supervisors expressed their sincere gratitude for the grant funding and shared their hopes that the CSDE will reissue the grant awards for the 2023 summer season. To improve the award application, distribution, and management processes, site supervisors provided their recommendations for improvement based on their experiences in 2022:

- Start the application and award process earlier (e.g., accept applications through March; announce grant awards in April)

- Simplify the online portal system
- Revise screening and placement decision-making processes for assigning College Corps workers
- Continue to expand acceptable uses for funding (e.g., transportation, increased/specialized staffing)

Site supervisors also listed three notable successes and challenges their camp faced. We coded their open-ended responses and captured those most frequently mentioned (Table 18). Roughly four of ten supervisors (41%) noted academic achievement and a reduction in tuition (39%) as among their highest successes. About three of ten mentioned high or increased enrollment (32%), camp programming (29%), and staff development (29%) as successes. Regarding major challenges, nearly half (46%) of the supervisors identified staff shortages. Another 24% noted collecting information for the grant and navigating the grant website.

When asked what kinds of resources would improve student participation and engagement in the future, about one-quarter of supervisors listed increased funding (26%), increased staffing (25%), and expanded program options and supplies (24%) (Table 19). Transportation (14%) and earlier access to grant resources were also mentioned as important resources for the future.

Table 18. Notable Successes and Challenges Identified by Site Supervisors (n=170).

Successes	Challenges
1. Academic achievement (n=70, 41%)	1. Staff shortages (n=68, 46%)
2. Reduced or eliminated (via scholarship) cost of tuition (n=67, 39%)	2. Collecting and reporting information for the grant, navigating grant website (n=36, 24%)
3. High or increased enrollment (n=54, 32%)	3. Timing of grant fund distribution (too late) (n=29, 19%)
4. General camp programming (n=50, 29%)	4. Impact of COVID on attendance, programming (n=27, 16%)
5. Hiring/staff development (n=49, 29%)	5. Low capacity, high waitlist (n=18, 12%)

Site supervisors also provided insight regarding ways the Summer Enrichment Innovation and Expansion grants will inform their future programming (Table 20). Responses from 157 site supervisors were wide-ranging. The most common influence was the carryover of successful camp curricula and facilities/materials. Additionally, 19% of supervisors highlighted the importance of supporting and investing in their camp’s staff, particularly staff who specialize in supporting students’ social-emotional learning (SEL). For some, the grant afforded camps opportunities to build meaningful partnerships with neighboring schools and communities (11%), as well as increase enrollment (11%) and financial aid (10%).

Finally, site supervisors provided recommendations for ways the state of Connecticut can improve the Summer Enrichment grant program moving forward. Half (49%) of the supervisors suggested starting the application and award processes earlier (Table 21). Less frequently noted recommendations were simplifying the online portal system, expanding the range of acceptable program items eligible for grant funds, reducing hefty data entry requirements during busy summer months, and considering video tutorials for portal navigation.

Check-In Visits

Informal site visits were made to 36 summer programs; roughly half of these were identified by the CSDE, prioritizing those sites without an OEC license, and the other half were randomly selected from the remaining Expansion grantees. The sites were located across all eight counties in Connecticut, with the majority in Fairfield and New Haven counties. The largest site served 1,075 participants throughout the summer; the smallest served 25. Campers’ ages ranged from as young as pre-kindergarten to as old as 22 years old in post-secondary transition programs.

Programmatic Emphases

Nineteen (53%) sites offered purposeful play curricula, including traditional indoor and outdoor camp activities such as athletics, dance, yoga, swimming, archery, crafts, and Legos. Several

Table 19. Future Resource Needs as Identified by Site Supervisors (n=159).

What kinds of resources would help you improve student participation and engagement in the future?	
Funding	n=42, 26%
Staffing	n=39, 25%
Expanded program options and supplies	n=39, 25%
Transportation	n=23, 14%
Earlier access to grant resources	n=18, 11%

Table 20. Influence of Grant on Future Programming (n=157).

How, if at all, will the innovation/expansion you implemented this summer inform your program in the future?	
Continue using camp curricula and facilities/materials	n=43, 27%
Maintain and/or expand staff (counselors and specialized staff)	n=30, 19%
Maintain school and community partnerships	n=18, 11%
Increase enrollment	n=18, 11%
Increase financial aid distributions	n=16, 10%

Table 21. Suggested Improvements for Future Implementation of the Grant (n=158).

What improvements would you suggest to the State of Connecticut if the Summer Enrichment grant program were to continue next summer?	
Start the application and award process earlier	n=78, 49%
Simplify the online portal	n=17, 11%
Expand what’s funded	n=10, 6%
Reduce hefty data entry requirements during the busy season	n=7, 4%
Consider video tutorials for portal navigation	n=7, 4%

purposeful play programs also offered partial exposure to academic enrichment, including literacy and STEM activities. Some purposeful play sites also presented specialized opportunities for campers to develop important social skills such as leadership and advocacy, social justice and cultural literacy, and women’s empowerment. Eight (22%) of the sites focused on offering academic support or enrichment, including, as one director noted, “preparing for the return to school — specifically working on time management and study skills and ensuring that participants are fully equipped for the new school year.” Other common academic enrichment activities included an “emphasis on math, literacy, and 21st-century [technology] skills.” Five (14%) of the sites focused primarily on college and career readiness, including exposure to potential career fields of interest, networking with mentors and field professionals, and assistance with early college experience courses and certifications. One site (3%) specialized in STEM activities (specifically aerospace science), and one site (3%) focused on athletics (primarily lacrosse) as tools for personal development.

Other Key Observations

Despite the variety of curricula across the monitored camps, most programs identified the same success: the Expansion and Innovation grant funds enabled these sites to offer free or reduced-cost programming to students whose families would not have otherwise been able to send their children to summer camp. One site shared a story of a young girl who was able to attend eight weeks of free summer programming because of a camp scholarship facilitated by the Expansion grant; the young girl’s mother regularly worked 10 hours each day and could not afford to send her daughter to camp. Instead of spending her summer indoors being watched by her neighbor, this young girl was able to attend early care, day camp, and extended afternoon care every day. The camp director shared

Thanks to the enrichment grant from the state, [the camper] had the opportunity to attend eight weeks

of summer camp at our school. We offered her early and late care as part of the scholarship, allowing [the mother] to bring her daughter to our school throughout the summer. Each week had a theme; I was there to see [the camper] always eager to participate in every single new activity that each week brought to the campers.

Leveraged by additional funding, these camp programs have offered enhanced social interactions, academic opportunities, and meaningful life experiences for many Connecticut youth.

Finally, a common challenge site supervisors shared was the timing of the grant given the needs involved with summer camp planning. One director noted, “The challenges the program has encountered were collecting data and the timing of the award announcement. The program originally had taken registrations before the funding was awarded and therefore needed to refund some of our families.”

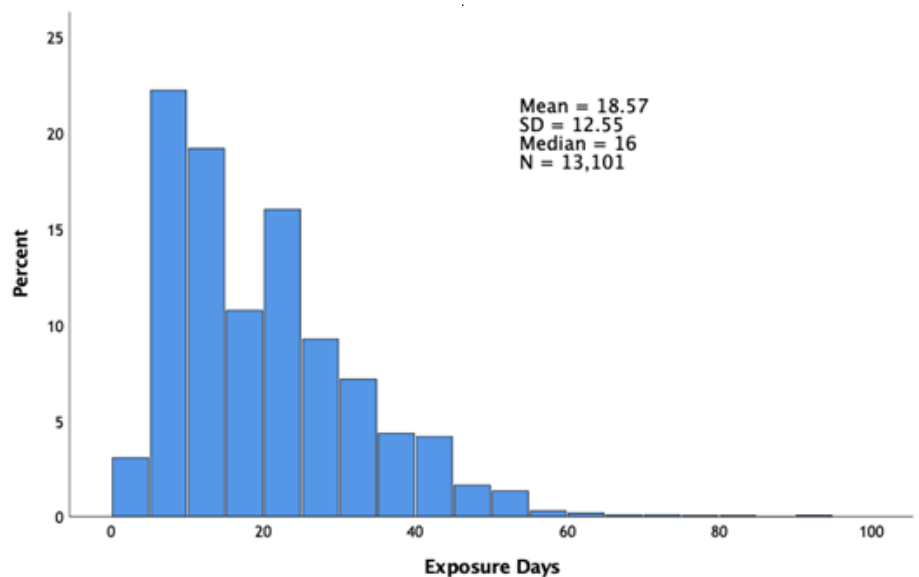
Impact Analysis

For the impact analysis, we examined whether summer program participation significantly affected student attendance in school the following year. We first had to define camp participation—the treatment (T). As noted earlier, site directors

were asked to estimate the number of “exposure days” for each camper. We transformed this variable into binary indicators because we assumed that a single-day-increment in summer camp attendance would have inconsequential effects on the outcome. We created two binary indicators that reflected different levels of participation at camp. The two treatment groups were students who attended camp for at least one day, symbolized by T_1 ($n = 13,101$), and a higher “dosage” level for students who attended for more than 20 days, denoted by T_{20} ($n = 5,863$).²⁸ The percentages of grade 3-8 students in the groups were 6.0% and 2.7%, respectively. Note that for all intents and purposes, T1 represents students who attended camp; the percentage of students who only participated for one day was less than 1% (see histogram of exposure days for T_1 in Figure 5).

We generated two outcome variables involving straightforward measures of student attendance at school. The first was attendance rate: the total number of days a student attended school divided by the total number of possible membership days. In our case, we obtained attendance data from the beginning of the 2022-23 school year through the end of May (roughly 170 membership days). Students with fewer than 150 member-

Figure 5. Distribution of Camp Exposure Days for Grade 3-8 Students who Attended a Summer Camp (n=13,101).



²⁸ Here, $T_{i1}=1$ if an individual i attended the summer camp at least one day and $T_{i1}=0$ otherwise, and $T_{i20}=1$ if an individual i attended the summer camp more than 20 days and $T_{i20}=0$ if not.

ship days were screened out. The second measure was chronic absenteeism, defined by the state as being absent at least 10% of the time (thus, any attendance rate of 90% or below).

We started by comparing the two treatment groups on attendance rate. An independent samples t-test was used to calculate the unconditional differences in average outcomes between students who attended summer camp at least one day ($T_1=1$) and those who did not ($T_1=0$). The t-tests demonstrated significant differences in average school attendance rates between both treatment groups.²⁹ These results, however, do not reflect the possible confounding effects of exogenous variables. For instance, a straightforward comparison of mean school attendance rates cannot account for a potential selection bias among students who attend camp—one which could influence model outcomes outside of any camp treatment.

Estimating the causal effects of camp participation is ideally done through an experimental design, where students are randomly assigned to treatment (camp) and control conditions (no camp). Because random assignment was not possible, we pursued quasi-experimental and correlational methods to estimate potential effects.

We initially employed a propensity score matching algorithm to estimate the causal effect of treatment indicators on the outcome variable. We fitted two logistic regression models by taking each treatment indicator as the outcome variable and using other individual-level variables as predictors. Specifically, we used grade level, membership attendance days, math test score, ELA test score, free and reduced-price lunch status, homeless status, EL status, special education status, high-needs status,

sex, and race. For this analysis, race was defined as a four-level variable: Black, Hispanic, Asian, and Other, using White as the reference category. Unfortunately, the estimated propensity scores failed to reflect the distribution of the treatment group. Consequently, we moved to an alternative modeling technique.

We utilized covariate-adjusted generalized linear models (GLM) to compute the projected probabilities of school attendance rates for campers and those who did not participate in camp. The application of GLM was suitable due to the significant skewness in the outcome variable, as most students demonstrated high attendance rates, which are by default capped at 100%. Our estimates were made while statistically controlling for grade level, prior year attendance, sex, race, free and reduced-price lunch status, EL status, special education status, and math and science test scores.

The estimates, shown in Table 22, indicate that students who participated in at least one day of camp had a slightly higher attendance rate (94.3%) than

those who did not attend camp (93.7%). Similarly, we examined students who participated in at least 20 days of camp relative to non-campers. Table 22 shows that high-dosage campers had a 3% higher predicted attendance rate than non-campers (96.1% vs. 93.1%). Both results are statistically significant differences, although given the high sample sizes, this is not altogether surprising or that consequential. The magnitude of the first difference, 0.6%, is relatively small; the second difference – for high-dosage camp students – is more meaningful. Extrapolating to a full 180-day school year, these differences represent an extra 1.1 and 5.4 days of school, respectively.

One plausible reason for the small estimated effects is due to limitations in the outcome variable, attendance rate. Consider the distribution for attendance rates is highly negatively skewed, with most scores bunched towards, but not exceeding, 100% (Figure 6). The restriction of range in attendance rate (in this case, a ceiling effect) substantially limits the ability of treatment status to discrim-

Figure 6. 2022-2023 Attendance Rates, Grades 3-8

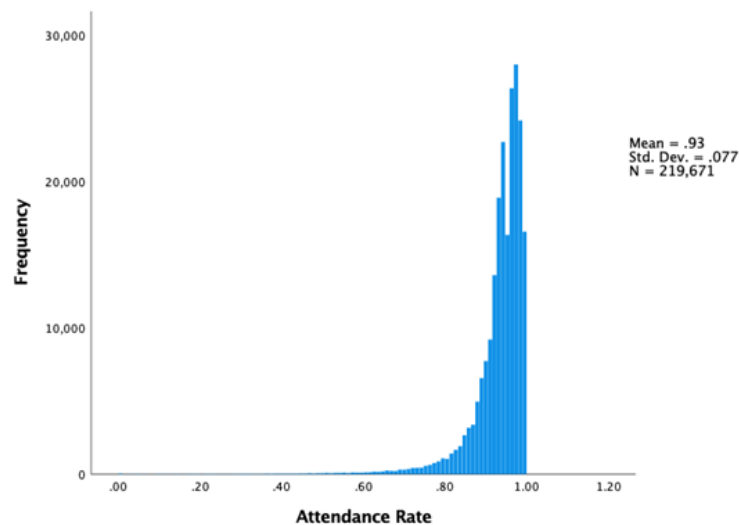


Table 22. Covariate-Adjusted Mean School Attendance Rate Estimates, Grades 3-8.

Camp ≥ 1 day (T_1)	No Camp	Diff.	Camp > 20 days (T_{20})	No Camp	Diff.
94.3%	93.7%	0.6%	96.1%	93.1%	3.0%

²⁹ T_1 campers = 94.4% vs. 93.1% for non-campers ($t = 26.995$, $df = 16434$, p -value < .000). T_{20} campers 94.7% vs. 93.1% for non-campers ($t = 21.9$, $df = 6468.9$, p -value < .000)

inate on this outcome variable.

Given the lack of sensitivity for detecting differences in school attendance rates, we also examined chronic absenteeism as the outcome variable. Because the chronic absenteeism variable is dichotomous, we used a covariate-adjusted logistic regression model. The results were consistent with earlier analyses but with larger estimated mean effects. We summarize the results for all students and selected student subgroups in Tables 23 and 24.

Notably, all estimated mean probabilities for both treatment groups ($T \geq 1$ and $T > 20$) are lower than the control groups. For instance, students who attended at least one day of camp exhibited a 10.9% chance of being chronically absent relative to non-campers, who had a 13.2% chance (Table 23).³⁰ Moreover, the differences are larger for the higher camp dosage of at least 20 days of exposure. In the overall case, according to mean probability estimates, high-dosage campers in grades 6-8 are 36.1% less likely to be chronically absent than non-campers ($0.097 - 0.132 / 0.097 = 36.1\%$).

Put another way, relative to campers, non-campers had 1.243 times higher odds of being chronically absent. Similarly, non-campers have 1.417 times higher odds of being chronically absent than campers who went for at least 20 days.

In terms of subgroups, low-income Hispanic students exhibit a relatively higher likelihood of being chronically absent, irrespective of camp participation. However, those who attended camp were *one-third* less likely to be chronically absent relative to non-campers ($0.155 - 0.205 / 0.155 = 32.3\%$)

A few caveats in interpreting these results are in order. First, we do not know whether camp participation *caused* lower chronic absences. There could be other influences on school attendance that remain unaccounted for here, which may be more associated with camp goers. For instance, families that encourage strong attendance in school may also be more prone to providing enrichment activities for their children – and vice versa.

Table 23. Participating in Camp at Least One Day: Estimated Marginal Mean Probabilities of Being Chronically Absent.

Students	Camp ≥ 1 day	No Camp	Difference*
Overall	0.109	0.132	-0.023
Free/Reduced Price Lunch	0.143	0.171	-0.028
English Learner	0.085	0.104	-0.019
Black	0.094	0.128	-0.034
Hispanic	0.131	0.158	-0.027
Black Free/Reduced Price Lunch	0.141	0.169	-0.028
Black English Learner	0.084	0.102	-0.018
Hispanic Free/Reduced Price Lunch	0.173	0.206	-0.033
Hispanic English Learner	0.104	0.127	-0.023

* Differences are all statistically significant at the .0001 level.

Second, the treatment, in this case, is the proverbial “black box,” as we could not account for what occurred across camps. We know there was variability across camps regarding activities, structures, resources, staff, and students. Therefore, it is difficult to attribute any potential causative influences of camp to anything but attending a camp. Third, there was missing data for some students and other students who could not be successfully matched to state administrative datasets. We do not know the degree to which these missing cases biased our sample. Fourth, because we only had data on students who attended a CSDE-funded summer camp, our control group of “no camp” students could have participated at a different camp that did not win a summer enrichment award; such treatment diffusion could compromise our results, but would likely lead to an underestimation of effects, if anything.

Finally, the fact that most results were statistically significant is likely a function of the high sample sizes; large n 's tend to produce statistical significance even when differences are small. More meaningful, then, are the magnitude of these differences or estimated effects, which we have expressed as mean probabilities and odds ratios. This all said, the results are highly consistent across scenarios with odds ratios always favoring the camp goers in terms of school attendance.

A possible future direction would be to conduct more focused studies on the effects of camp participation on student attendance or measures of student wellbeing. For instance, certain types of camps or camp programming could nuance the treatment-outcome relationship. Further, we encourage investigation into other potential sources of information on children who attend

³⁰ The tables present probabilities in terms of proportions. To convert them to percentages, we multiplied the proportions by 100.

Table 24. Participating in Camp More Than 20 Days: Estimated Marginal Mean Probabilities of Being Chronically Absent.

Students	Camp > 20 days	No Camp	Difference*
Overall	0.097	0.132	-0.035
Free/Reduced Price Lunch	0.127	0.171	-0.044
English Learner	0.075	0.104	-0.029
Black ³¹	0.094	0.128	-0.034
Hispanic	0.117	0.158	-0.041
Black Free/Reduced Price Lunch	0.126	0.169	-0.043
Black English Learner	0.074	0.102	-0.028
Hispanic Free/Reduced Price Lunch	0.155	0.205	-0.050
Hispanic English Learner	0.093	0.127	-0.034

* Differences are all statistically significant at the .0001 level.

summer camps — for example, identifying particular school districts and tapping existing survey data or gathering new data on students/families to identify characteristics that improve our ability to use strong quasi-experimental approaches, such as propensity score matching, which we could not do here.³²

RECOMMENDATIONS

Below we offer recommendations based on our findings, the summer camp research literature, and our continued involvement in evaluating the Summer Enrichment Program over two years (see year 1 report for more information). The recommendations are made with two general audiences in mind — state policymakers and camp leaders — although some recommendations remain more relevant to one or the other group.

Aim for the Equitable Distribution of Funding

Discernible across multiple site observa-

tions was the impact that camp facilities had on the allocation of grant funding. For example, one site was located on the campus of an affluent high school. The camp had free access to many classrooms across the campus, including computer and science labs, along with an expansive library. Given these affordances, the camp was able to use grant funds to hire a full-time SEL counselor for student support and expand its scholarship program. In contrast, other camps with lesser facilities were obligated to spend their funds on more basic needs. As an example, one camp situated in the rear lot of an elementary school, with little to no shade, used a large portion of its funds to purchase passes to the town pool. There was a basic need to get students some shelter during hot weather. In both scenarios, students benefited from the application of funds; however, the camp with the lesser facility used a greater proportion of its funding to make up for its shortfall in facilities. Both

camps received similar levels of funding, but one camp had far higher needs, resulting in a somewhat inequitable distribution of funds. This is not to say that well-resourced sites are ill-deserving of grant funding — all the better if they can use funds for scholarships to expand access to students who might otherwise not have the opportunity for high-quality experiences. The state may consider need-based allocations and prioritize additional funding for less-resourced camps.

Explore Group Access to Regional Entities

Staff and students commonly highlighted access to field trips, special destinations, and unique programming as sources of excitement. Some camps were able to make up for limited facilities by taking their students on field trips or bringing presenters to their sites. One camp regularly invited special guests on Fridays, while another recruited experts to share their knowledge on specific topics, such as the history and pottery of Indigenous Americans. Other camps purchased passes to pools or recreation facilities. Given the attraction and enrichment benefits of field trips, the state may help facilitate low-cost access to common points of interest. For example, the state could consult with camps to identify educational or recreational entities (e.g., Connecticut Science Center, Mystic Aquarium) by region and negotiate cost-effective bulk rates for attendance. Such actions could inspire camps that might not have otherwise considered these experiences.

Consider a Centralized Hiring Database and State Logistical Support

Staffing emerged as a major concern for many camps across the state. In one camp, counselors were working 12-hour days on occasion to provide before and after care due to inadequate staffing. Another camp pointed to chronic understaffing as a reason they relied heavily on volunteers. Ironically, staffing shortages were exacerbated when enrollment was expanded through increased scholarships. In another camp, a staff mem-

31 The estimates for T≥1 and T>20 are indeed the same.

32 The estimates for T≥1 and T>20 are indeed the same.

ber noted the difficulty in attending to individual students' social-emotional well-being while being responsible for large groups of children. From our observations, camps appeared to rely on peer networks for recruiting staff; many were former campers or previously connected to the program in some manner. Given the staffing challenges, it may benefit camps to participate in a collective job board similar to the CTREAP teaching job posting system. This could empower camps to fill existing vacancies or help them find specialists such as SEL coaches or trained counselors to better serve their students. Another possible option is for camps to collaborate with state workforce development programs, particularly those aimed at young adults.

Fine-tune the Logistics of the Grant Application and Awarding Process

Site supervisors requested that the application and award process begin earlier so that they can adequately plan for staffing, programming, and increased student enrollments. Some also suggested simplifying the online portal and offering short video tutorials for portal navigation. Others requested reducing the amount of data entry requirements during the busy season. One of the more pressing concerns, at least for some camps, was not receiving their grant funding until late summer. Perhaps the state can collaborate with a small group of camp leaders to develop a schedule that would work efficiently for state personnel and camps.

Focus on Sustainable Expansion

An important consideration for grant recipients is to use grant funds in a sustainable manner both for in-season logistics and long-term planning. Using the grant funds for expansions to the camp — in terms of programming, facilities, or number of students — may appear desirable and straightforward, but doing so without careful consideration of the implications could prove problematic down the road. For instance, expanding the number of campers without adding extra staff may stress the operations of a program. Increasing the program size by using grant funds for scholarships

may help a camp serve more students, but if well-trained staff are not added commensurately, student and staff experiences can suffer. At one of our site visits, a major complaint from students was that they did not have enough time to engage in the activities they enjoyed, partially due to expanded camp rosters without analogous increases in staff. In another case, a staff member noted they needed additional training and support to manage the needs of individual students while simultaneously managing an expanded group.

Prioritize Staff Training and Guidance

Camps are very aware of the need to train and develop their staff to work effectively with youth. Indeed, the skill level among camp staff is a major determinant of camp quality. Training staff is easier said than done, however. In multiple site visits, staff training was brought up as either a source of strength or a source of need. In one program, the entire summer staff had been given a week-long training session covering camp operations and basic SEL responsiveness guidance. They credited some of the success of the camp to this training.

Other programs with more specialized student populations, such as those that served students with intellectual or developmental disabilities, implemented SEL curricula that addressed the specific needs of their participants. In contrast, the staff of another camp felt underprepared to manage student needs, especially emotional needs, and that they required more training in this area. In general, programs should see staff training as a way to both embed concrete organizational values and procedures, as well as help their workforce be responsive to student needs. Targeted guidance and support from the state on training staff would be helpful — and releasing funds earlier would greatly facilitate hiring and training staff. The state could, for instance, suggest proper staffing ratios and provide relevant training for camp staff. Not all camps are the same, but certain training could be required as part of the grant.

Foster Curiosity via Student Experiences Inside and Outside Camp

Across multiple site visits, the core idea of summer camps being an opportunity for novel and “special” experiences for campers was an important theme. Elements of the programs in which students were most excited varied widely based on many factors, including camper age, camp context, and program goals. However, students were united by excitement for experiences they would otherwise not have access to. In some cases, students were thrilled to “get a head start” on academic topics they would see during the year or to practice for team sports tryouts. Other students were focused on novel activities they only experienced at camp, such as podcasting, 3-D printing, fishing, and paper quilling. In some cases, field trips and special programming were the most memorable aspects for kids. Most commonly, students were excited for play, especially outdoor physical activities, that they were able to do with their peers. In general, students were excited about camp as a place for new experiences or experiences they could only find there. Summer programs can continue to foster students' curiosity toward learning by encouraging active and creative play, planning field trips or guest presenters, and integrating academics into fun activities that encourage active participation and engagement from all students.

Promote Equity, Diversity, and Cross-Cultural Understanding

Providing children with an educational environment that celebrates racial and cultural differences helps them become more empathetic and informed in a globalized world (Banks, 2008).³³ Although roughly 60% of campers “always” or “mostly” interacted with campers who were different from them, more than a quarter (28.6%) of students indicated that camp activities seldom or never exposed them to other cultures. The Summer Enrichment Program can ensure that camps attend to this by having applicants describe their planned activities promoting diversity and cross-cul-

33 Banks, J. A. (2008). Diversity, group identity, and citizenship education in a global age. *Educational Researcher*, 37(3), 129-139.

tural awareness.

Consider Tailoring Summer Programs for High School Students

Nearly half (45.3%) of the students surveyed at the summer programs were entering primary grades, while only 8.5% were in high school. The relatively low participation rates are unsurprising, as many teens may need or wish to work during the summer. Many are also asked to watch over family members, such as younger siblings. Nevertheless, it may be worth discussing ways to reach older students. For instance, camps could offer flexible schedules or payment options (e.g., daily punch cards).

Offer Summer Enrichment Staff “Fall Summit”

Feedback from staff revealed that many programs encountered similar challenges. For instance, how can camps serve children faced with social-emotional issues? How do camps best handle staff shortages? How can camps support families with transportation needs? A wealth of knowledge lies in camp staff from across the state. Creating opportunities for practitioners to share best practices and engage in thoughtful dialogue on common problems of practice is an effective form of professional learning. In some cases, challenging topics may be best informed by outside specialists. The state could consider hosting a summit where grant alumni come together to tackle their most pressing challenges.

RECOMMENDATIONS FOR FUTURE RESEARCH

Examine Effects of District-Camp Partnerships on Student Outcomes

We have observed summer programs that maintain strong linkages with nearby schools. For instance, one school identifies students who are academically and/or social-emotionally at risk and works to connect their families with a partnering camp. The students participate in academic enrichment in

Recommendations

1. Aim for the Equitable Distribution of Funding
2. Explore Group Access to Regional Entities
3. Consider a Centralized Hiring Database and State Logistical Support
4. Fine-tune the Logistics of the Grant Application and Awarding Process
5. Focus on Sustainable Expansion
6. Prioritize Staff Training and Guidance
7. Foster Curiosity via Student Experiences Inside and Outside Camp
8. Promote Equity, Diversity, and Cross-Cultural Understanding
9. Consider Tailoring Summer Programs for High School Students
10. Offer Summer Enrichment Staff “Fall Summit”

the morning and join the other parts of the camp in the afternoon. Some camps target their recruitment to low-income families; doing so in partnership with schools that know their students well can potentially better channel resources to students and families most in need. We propose to study such models in a district (or districts) that set aside funding to support targeted and strategic recruiting of low-income students for summer programs who may experience chronic absence in school or who are otherwise at risk. A recruitment effort offering a fee waiver and transportation, paired with provision of specific summer program elements (i.e., a common set of best practices), sets the stage for a quasi-experimental design that would serve as a “proof of concept” for the efficacy of such school-camp partnership models. For example, using a regression discontinuity design, students enrolled in the program could be compared to non-enrolled but closely matched students on school attendance and DESSA scores.

Strengthen or Expand Causal Research Designs

We encourage the continued use of matched-control designs to study the effects of camp participation on school outcome measures such as student

attendance and student wellbeing. Part of the challenge of conducting quasi-experiments on the Summer Enrichment Program is the wide variability across camps in terms of theme, curricula, size, duration, daily schedule, and the like. The extreme variation makes it difficult to define the treatment beyond resorting to the proverbial “black box.” Identifying a common intervention, or common set of interventions, would help improve the internal validity of causal claims. We also suggest exploring other causal designs. For instance, instead of matching campers to non-campers (i.e., matched controls), the effects of camps could be assessed more directly using campers as their own controls. That is, campers could be assessed before and after attending camp using established social and behavior measures. Finally, to improve upon the ability to statistically control for exogenous factors (i.e., factors that may influence student outcomes beyond the treatment) we recommend collecting targeted sources of information on children who attend summer camps. For example, tapping existing school survey data or gathering new data on camper households to identify characteristics that improve our ability to use strong quasi-experimental approaches (e.g., household highest education level).



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CCERC Administrative Team

Ajit Gopalakrishnan

Co-director

Chief Performance Officer, CSDE

Dr. Morgaen Donaldson

Co-director

Associate Dean for Research, University of Connecticut

Dr. Alexandra Lamb

Project Manager

Postdoctoral Research Associate, University of Connecticut

Steering Committee

Dr. Eric Loken

University of Connecticut

Dr. Betsy McCoach

University of Connecticut

Dr. Kayon Morgan

University of Hartford

Dr. Kari Sassu

Southern Connecticut State University

Dr. Michael Strambler

Yale University

Dr. Tricia Stewart

Western Connecticut State University

Dr. Wesley Younts

University of Hartford