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## Making Summer Learning Equitable for Students in a Rural, Title I School District: Turning on the Faucet of Resources

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## Making Summer Learning Equitable for Students in a Rural, Title I School District: Turning on the Faucet of Resources

### Abstract

This research explores summer learning loss and the effect of summer resources on students' literacy growth. Using the faucet theory, this mixed methods sequential explanatory study was designed to provide equitable resources and educational support for students in grades five through eight in a rural, socioeconomically disadvantaged school district. Transportation, breakfast, lunch, books, and a literacy-focused enrichment program were coordinated and provided for all participants in an effort to reduce learning loss during summer break. The pragmatic approach to inquiry incorporated both quantitative (e.g., literacy outputs, registration, and attendance data) and qualitative data (e.g., parent open-ended question responses). Convenience sampling was used to recruit 97 students for this study. Summer learning gains were reported for two grade levels and three grade levels maintained above benchmark status throughout the summer. Students (74%) believed that their reading skills had improved and parents (100%) wanted the program to continue in the future. Registrations increased by 746%, retention increased by 34%, and daily participation increased by 18%. This study did not attempt to measure all factors that affect students' summer learning, but factors that could reasonably be provided by a school district. Recommendations for practice include the provision of school-year resources and the delivery of enrichment-focused instruction during the summer months. Additional research is recommended to study the summer learning loss of male and female adolescent learners. In addition, continued research and multi-year studies are suggested for summer learning programs for adolescent learners.

### Keywords

Summer learning loss, summer slide, resources, socioeconomic disadvantage, rural, middle-school readers, summer learning, registration, attendance, book access, transportation, nutrition, STAR reading, benchmarks, literacy growth

### Author Bio

Kathrina M. O'Connell, Ed.D., will begin the 2020–2021 academic year as an assistant professor of Professional Education at Bemidji State University. She taught sixth graders and multilingual learners in a rural, Title I school for nine years. She has also taught in the Bureau of Indian Education (BIE), Department of Defense Educational Activity (DoDEA), private, and international schools encompassing work with students in PreK through high school. She received both her master's degree in Teaching English as a Second Language and doctoral degree in Educational Leadership from Minnesota State University Moorhead. Her research interests include literacy instruction, reading engagement, and students' motivation to read.

## **Introduction**

All readers, struggling readers, gifted readers, motivated readers, unmotivated readers, and readers learning the English language, need supports that encourage literacy growth. During the school year, students have equal access to learning opportunities and resources that foster academic growth and promote literacy development. Students are provided with transportation to and from school, nutrition, book access, and instruction that supports learning growth. During the summer months those same resources become limited or inaccessible for many students. Students might not be able to access educational opportunities, they may experience food insecurity, and reading materials can become scarce or nonexistent. Students with limited resources become at risk for summer learning loss but schools can eliminate barriers to summer learning and support students' literacy development all year.

## **Background**

### **Summer Learning Loss**

The summer slide, or summer learning loss, occurs when students lose academic knowledge gained in the school year during the summer months when they do not have access to educational opportunities (Allington, et al., 2010; Leefat, 2015). Zvoch and Stevens (2015) conducted a five-year study with a five-segment model to evaluate the effect of summer school learning on the academic progress of primary grade students, at five specific points, over the course of two academic years. The assessments demonstrated that when students were engaged in formal learning at school their academic skills improved. When school was out of session or students were not attending summer school, their scores declined. Shin and

Krashen (2008) also acknowledged that students' reading and vocabulary growth were greatly affected by summer school activities or the lack of summer learning activities.

### **Socioeconomic Disadvantage**

Researchers have noted that students in low socioeconomic status (SES) households make educational gains that are similar to students in higher SES homes during the school year. It is the summer break that negatively affects students from low-income homes (Allington et al., 2020; McDaniel et al., 2017) and it is the summer months when students from low socioeconomic households fall behind (Almus & Dogan, 2016; Gao et al., 2016). According to the Minnesota Department of Education (2018) students from low-income households lose two months of learning skills in the summer months. Similarly, Mokhtari and Velten (2015) cited research that students may lose as much as three to four months of reading ability without access to reading and writing opportunities in the summer months.

The American Psychological Association (2017) noted that there is a connection between lower SES and lower academic achievement that contrasts the growth of students in higher SES communities. The achievement gap widens during the summers, with students from low SES families falling further and further behind their classmates (Dietrichson et al., 2017). The achievement gap grows over time to become significant (Leefat, 2015; Shin & Krashen, 2008) so “preventing summer learning loss, particularly among low-income students, can play a critical role in closing the achievement gap” (Gao et al., 2016, p. 116).

Leefat (2015) noted that students from socioeconomically disadvantaged households “who do not participate in any summer enrichment or remedial programs in the elementary school will enter middle school at a significant, and virtually insurmountable, academic disadvantage” (p. 557). Dotson and Foley (2016) also agreed that summer enrichment and

summer school programs would benefit middle school student achievement. McEachin et al. (2018) and Pitcock (2018) emphasized that without summer education, low-achieving students simply cannot catch up, stating that “young people who are behind need more time for learning, and more time during the school year alone will never solve the complex inequities of summer or close the achievement gap” (p. 8). Direct engagement in summer school and summer reading programs are crucial opportunities to reduce the reading achievement gap for students from low-income households (Dotson & Foley, 2016; Gershenson & Hayes, 2017; Shin & Krashen, 2008).

Enrollment costs and transportation barriers often hinder access to summer learning activities for children from socioeconomically disadvantaged household. “Higher family income allows expenditures for books, computers, and other resources” (Entwisle et al, 2001, p. 12) while the financial burden of educational or sports programming fees often prevent children from lower-income households from participating in summer learning activities. Parents’ work schedules and/or lack of transportation to school pose challenges for students in the summer months. School programs, libraries, and other learning events become limited or inaccessible for students.

In addition to barriers that may prevent students from accessing learning opportunities during the summer months, many families struggle to provide the nutrition needed for academic and physical growth. As the Food Research and Action Council(2017) stressed in the title of its summer nutrition report, “hunger doesn’t take a vacation” (p. 1). Families that rely on nutritional support during the school year struggle when school is closed for the summer. Food insecurity increases and summer learning decreases.

## **Geographic Isolation**

Geographic isolation is another, less identified, contributing factor to the achievement gap because “resources and services to support student success are less available in rural environments” (Griffin & Galassi, 2010, p. 87). According the U.S. Census Bureau, roughly 20% of the U.S. population was documented as rural in 2010 (Ratcliffe et al., 2016, p. 1). Rural was considered an area that was less densely populated, sparsely populated, not built up, or “at a distance” (Ratcliffe et al., p. 4). Tichnor-Wagner et al., (2015) noted that studies on literacy and poverty tend to focus on urban and suburban schools, even though rural students “spend longer time living in poverty and experience deeper levels of poverty” (p. 7) than students living in more urban areas. “These rural children cannot access so readily resources seen as common to urban children—libraries, museums, and other community agencies that offer additional educational opportunities” (VanTassel-Baska & Hubbard, 2016, p. 287). Resources found in urban and suburban areas are either unavailable or inaccessible for students living in rural areas.

One of those such resources is book access. Geographic isolation is a reason for reduced access to reading materials (Tichnor-Wagner et al., 2015). McGill-Franzen et al. (2016) stressed that “children in rural areas face even greater hardships in accessing print and electronic books” (p. 539). All students have access to books during the school year, but many students may not have books to read during the two to three months of summer vacation.

Geographic isolation also negatively impacts the academic growth of gifted learners. Their limited accessibility to learning opportunities can hinder accelerated growth. Aside from the regular school year, summer programs “with academic challenges are especially

critical for gifted learners from rural America” (VanTassel-Baska & Hubbard, 2016, p. 302).

Summer learning loss affects all learners at all reading levels.

### **Summer Learning**

In order for students to improve as readers, they must engage in regular reading practices. Fisher and Frey (2018) stressed that “learners need deliberate, distributed practice that extends beyond the school day and year” (p. 91). If formal summer learning programs are to be created to reduce the achievement gap then they need to take on an “accelerated or enrichment approach” (Leefat, 2015, p. 572) rather than a remedial approach. The summer learning environment “stands to mitigate the negative effects of out-of-school time on children’s literacy skills” (Xu & DeArment, 2017, p. 91). Creating a summer learning environment that specifically addresses the literacy learning of students is critical, especially for students from low-income households.

Carefully planned and motivating summer learning programs can reconnect students with reading and build their skills and confidence as readers. This growth can reduce the reading achievement gap and give students the boost they need to excel in school and life outside of school. Building literacy goes far beyond improving a child’s ability to read and write. It speaks to the larger social issues of access and equity. When students are literate, they can participate positively in their communities and engage in and contribute to society in productive ways (Minnesota Department of Education, 2011).

This study attempted to turn on the faucet of resources in the summer months, providing students with supports normally available during the school year but not typically provided in the summer. In doing so, literacy outcomes, registration and attendance, and student and parent perspectives were evaluated in order to determine effective literacy

programming for future summers. The study demonstrated what can be achieved when schools support students' literacy development all year.

### **Theoretical Framework**

Entwisle, Alexander, and Olson's faucet theory provides an explanation as to why students from lower-income households lose more academic skills in the summer months (Quinn & Polikoff, 2017, para. 4). The faucet theory asserts that schools provide a flow of resources for students that encourage learning during the school year. Schools provide materials, meals, education, and supervision during the school year, and "children of every economic background benefit roughly equally" (Allington et al., 2010, p. 413). However, during the summer months when school is no longer in session, the faucet of resources is turned off. Resources continue to flow for children in middle- and higher-income households, as their families are able to provide for their nutritional and academic needs. These students continue to learn through "enrichment activities, literacy exposure, and other opportunities provided by families and the community" (McDaniel et al., 2017, p. 674). For students living in low-income households, the faucet runs dry. They "lose access to critical services altogether when the school doors close" (Pitcock, 2018, p. 5). Families cannot make up for the lack of resources and the result is a decline in student achievement.

Almus and Dogan (2016), in their study of a summer learning program, found that student participation in summer learning programs dramatically increased when students and their families were offered free transportation, breakfast, lunch, and other attendance incentives. In addition, "students from all grade levels benefited from the program in the area of reading." Supporting students with resources and educational programming in the summer months can have a positive impact on literacy growth.



## **Study Goals and Objectives**

The goal of this mixed-method sequential explanatory study was to create a middle-school summer literacy program that supported students with educational enrichment, transportation to the program, nutrition, and book access. The objective of the study was to reduce summer learning loss and close the literacy achievement gap for middle-school students. The purpose of the research was to evaluate the effects that result from eliminating barriers to education in the summer months.

The pragmatic approach of the study focused on the provision and implementation of the Literacy Academy's elements in order to make improvements for future summer learning programming. The quantitative measures (e.g., STAR scores, registration, attendance data, and student feedback) were combined with qualitative measures (e.g., parents' feedback) in order to generate an analysis of the program's effects on students' participation and learning while also giving families voice to the research. The study was created to support students' summer literacy growth, so the amalgam of data provided information on student learning as well as the value of the program's success.

## **Method**

The mixed-method sequential explanatory design was used to create a literacy-focused summer learning program for adolescents that contained the characteristics of educational enrichment, transportation, nutrition, book access. The effect of these characteristics was measured by literacy outputs, student responses, registration and attendance data, and parent comments. Qualitative data, in particular, were used to provide voice to the participants for whom the study was created to support.

The time-series design featured STAR assessments in May, July, August, and September 2019. This was done to monitor summer learning loss and any immediate effects of the Literacy Academy. Students' Likert scale responses provided additional input into their literacy growth. Registrations and daily attendance provided qualitative data while parent responses provided reasons for students' registration and regular attendance.

### **Research School**

This study took place in a small, rural school in Minnesota. The research school district was comprised of two schools, an elementary and a high school, with each school located in a different town. The high school (grades 7–12) had 327 students and 285 of them relied on bus transportation to and from school during the school year. The elementary (grades K-6) had 395 students and also housed a Head Start and a preschool program. Of the 461 students who attended school at the elementary building, 396 required bus transportation provided by the school district. The reported student population was primarily Caucasian with seven percent minorities such as American Indian, Asian, Hispanic, and multiple ethnicities. The free and reduced lunch population (FRLP) at the high school was 30% and was 36.5% at the elementary.

For students in the research school, the closest library was seven miles from the elementary school and 14 miles away from the high school. The distance was even further for families living on the outskirts of the district boundaries, out in the country. Prior to 2019, the elementary school library was only accessible to summer school participants. Summer school participants could read books in the library, but they were not allowed to check out books to take home.

Summer school programming was different for the elementary and high school buildings. Summer school was mandatory or punitive at the high school. If a student failed a class, he/she was required to attend summer school. Summer school at the elementary was voluntary. Both schools presented summer school as a remedial or catch-up program.

This research project used a mixed-methods sequential explanatory design to analyze the effect of supports and a literacy-focused program on students' reading outcomes. Quantitative features included the norm-referenced Standardized Test for the Assessment of Reading (STAR) reading scores (Renaissance Learning, Inc., 2013), registration and attendance data, and student and parent questionnaire results. The time-series design evaluated students' STAR reading outcomes four times (May, July, August, and September). Registration data were compared to summers 2015–2018 and attendance data were compared to summer programming in 2018. Likert questionnaires were given to both students and parents to determine factors that motivated registration and participation in the summer learning program. Qualitative data were collected from open-ended questionnaire responses.

### **Participants**

Convenience sampling was used for this study. Students who were enrolled at the research school and were in grades four through seven during the 2018–2019 school year were eligible to participate. Once the school year ended in May 2019, students were enrolled at the next grade level for summer school. For example, once school was finished in May, a fifth-grade student was classified as a sixth-grade student for all school paperwork and research documents. Data reflected the participation of students in grades five through eight.

Voluntary participation in summer learning was historically low at the school district so a great deal of positive promotion was needed for the new summer Literacy Academy.

Informational flyers were given to parents at parent-teacher conferences in February. This allowed classroom teachers to personally encourage student participation in the program and it saved the district postage. The researcher also visited elementary classrooms weekly to encourage participation. In addition, the researcher provided flyers for seventh-grade students and parents at the high school building and created promotional videos to share with them.

### **Summer Literacy Academy**

During the last week of school in May 2019, all participants selected eight complimentary texts from a pool of over 1,100 texts. The number was set at eight books to provide one book for each week that students were away from school, from May until the beginning of the program in July. At the end of the Literacy Academy in August, all students received an additional two books to ensure book accessibility until school started two weeks later in September. All of the books were acquired by the researcher through grant writing and monetary donation requests.

All students also received free transportation to and from school for the four-week Literacy Academy. The provision of school-provided transportation was requested by the researcher and required two school board presentations to gain approval. In order to set limits on the unknown expense of creating new bus routes in a rural district, the school board established transportation limits for students living within district boundaries. Students who were open-enrolled, who were enrolled in the district but lived outside of district boundaries, did not receive free transportation. They could still participate in the program but needed to secure their own transportation.

Nutrition was also provided for students in the form of daily breakfast and lunch. The researcher wrote grants to provide free meals for participants, but collaboration with the food

services director resulted in free summer meals for all students in the school district. The school district applied and qualified for the Minnesota Eats program, a five-year program providing summer meals for all students under the age of 18.

The Literacy Academy was conducted for four weeks in the middle of summer in 2019 (mid-July to mid-August). Classes ran Monday through Thursday for four hours each day. Each instructional day included four 40-minute classes, 20 minutes each for breakfast and lunch, and 25 minutes for outside recess. From the perspective of the high school schedule, the Literacy Academy provided a quarters' worth (minus nine days) of instruction. At the elementary level, the program provided 20 days of literacy instruction in 15 days (there was no formal instruction on the last day due to a field trip to a local bookstore).

The Literacy Academy curriculum was written by the researcher incorporating research-based best practices. Students rotated through four classes: independent reading with teacher conferencing, teacher read-aloud with writing, small-group shared reading, and readers' theater. Each week had a genre (e.g., fiction, nonfiction, poetry, and biography) and a Common Core State Standard (CCSS) anchor standard focus (Common Core State Standards Initiative, 2019).

Eight instructors received training on the goals of the program, expectations for each class, and the requirements of the summer program (attendance and the monitoring of breakfast, recess, and lunch). All materials were prepared for the instructors ahead of time and there were no worksheets, busy-work, or skill-and-drill activities. Class sizes ranged from 10–12 students and all activities emphasized reading engagement through creativity, communication, collaboration, and higher-order thinking skills.

## **Data Collection**

### ***STAR Reading Assessment***

All students in the research school regularly took the STAR reading assessment in September, January, and May for benchmarking purposes. The one-sample T-test for means was used to check for statistically significant differences in STAR scores from May 2019 to September 2019. In addition, the tool was used as a pre- and post-test for the Literacy Academy. Participants took the STAR reading assessment on day one of the program and on day 14 of the program.

### ***Registration and Attendance Data***

Registration data were collected for summer 2019 and compared to summers 2015–2018. Attendance data were collected daily by classroom teachers and recorded by the researcher. Specific attendance data were only available for 2018 so the Literacy Academy attendance data were compared to the one summer.

### ***Student and Parent Questionnaires***

End of Program Questionnaires were given to students during the last week of the Literacy Academy. Students were asked if supports (e.g., transportation, meals, books) motivated them to attend the Literacy Academy. Students were also asked if the literacy focus motivated them to attend the summer program.

End of Summer Questionnaires were mailed to students and parents in September 2019. The questionnaire asked students if the book distribution made it possible for them to read in the summer months and if their reading skills had improved because of participation in the Literacy Academy. Parents were asked if the program should be offered again in the future.

### ***Open-Ended Questionnaire Responses***

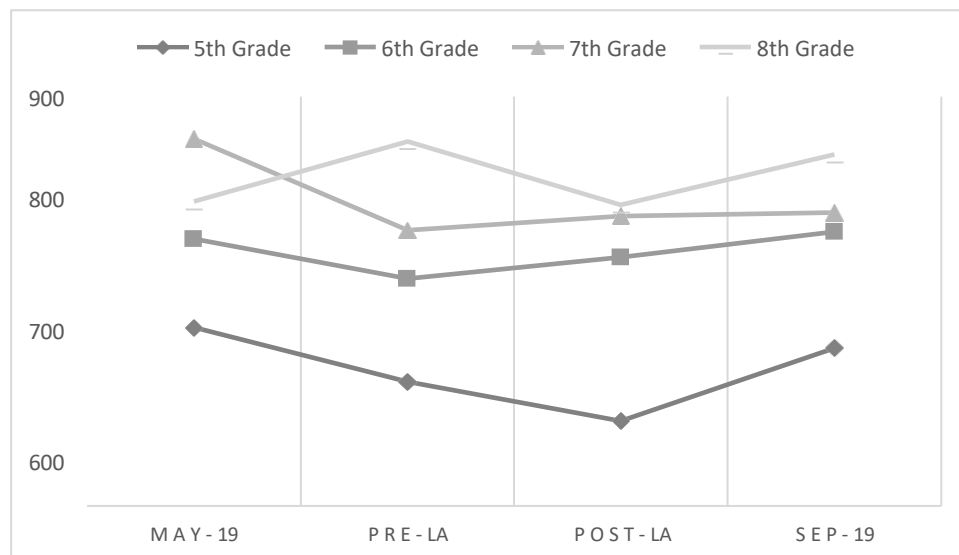
Parents were asked in the End of Summer Questionnaires why their child attended the Literacy Academy in 2019 but did not attend summer school in 2018. They were also asked to provide comments for future summer programming. These responses were organized into themes for reporting qualitative results.

## **Results**

### **STAR Reading**

Pre- and Post-Literacy Academy mean STAR scores were calculated to observe any effects that the program may have had on immediate learning outcomes. As a whole, STAR results did not reflect program-wide positive outcomes. The one sample t-test for means indicated that the STAR pre-test given in July was greater ( $M = 620.81$ ,  $SD = 279.91$ ) than the STAR post-test given at the end of the Literacy Academy in August ( $M = 599.35$ ,  $SD = 313.07$ ) and this was statistically significant ( $t(68) = 15.9$ ,  $p < .001$ ). As individual grade levels, fifth-grade students dropped 57 points and eighth-grade students dropped 93 points. Two grade levels reported learning gains as grade six gained 31 points and grade seven gained 21 points during the four-week program.

Data were also analyzed to check the effect of the Literacy Academy on overall summer learning loss. The one sample t-test showed a higher mean score in May ( $M = 704.58$ ,  $SD = 255.81$ ) than in September ( $M = 660.56$ ,  $SD = 248.11$ ). The difference was statistically significant ( $t(68) = 15.9$ ,  $p < .001$ ). Students lost an average of 44.02 points during the summer months. As individual grade levels, learning gains were achieved. Students in grades six and eight started the school year in September 2019 with higher mean STAR scores when they left for summer break in May 2019 (See Figure 1).

**Figure 1***STAR reading results, May 2019 - September 2019*

An independent samples t-test was conducted to check for mean differences in STAR scores for male and female students. The higher mean score for female students was present prior to the Literacy Academy and continued throughout the summer. The Leven's Test for Equality of Variances assumed equal variances for the two groups. The mean STAR score for females ( $M = 728.40$ ,  $SD = 262.02$ ) was greater than males ( $M = 681.82$ ,  $SD = 250.55$ ) in May and the statistical difference was  $t(86) = -0.85$ ,  $p = .40$ . September mean STAR scores also varied for female ( $M = 715.33$ ,  $SD = 251.94$ ) and male ( $M = 610.18$ ,  $SD = 235.90$ ) students. The difference was statistically significant ( $t(86) = -2.11$ ,  $p = .04$ ). The mean STAR scores for the male group demonstrated a greater loss in literacy skills. The female group started the 2019 school year with a loss of 13.07 points while the male students started the school year with a loss of 71.64 points.

STAR benchmarks indicated a reduction in summer learning loss. Since the research school district used STAR benchmark categories for instructional purposes, to predict



students' expected growth and performance on the Minnesota Comprehensive Assessments (MCAs) in the spring, benchmarks were used as a point of reference for this study. In 2019, all grade levels maintained their benchmark categories. Grades five, six, and seven maintained above benchmark and grade eight maintained below benchmark category. Eighth-grade students started the school year in September 2019 with a gain of 68 points, but it was not enough to move up to the above benchmark category.

Looking at retrospective data (See Table 1), grade levels experienced learning losses in 2018 but also drops in benchmark categories. Grade six and seven started summer 2018 at above benchmark but then returned to school in September 2018 below benchmark.

**Table 1**

*STAR Reading Scores and Changes, From May to September, With Benchmark Categories*

Grade	May 2018	Sept. 2018	Change	May 2019	Pre-Test	Post-Test	Sept. 2019	Change
5 <sup>th</sup>	340.29	319.81	-20.48	561.53	481.38	424.31	531.22	-30.31
	Below	Below		Above	Above	Below	Above	
6 <sup>th</sup>	494.00	501.85	+7.85	691.00	633.06	664.40	701.76	+10.76
	Above	Below		Above	Above	Above	Above	
7 <sup>th</sup>	642.89	625.56	-17.33	837.87	703.90	724.63	729.72	-108.15
	Above	Below		Above	Above	Above	Above	
8 <sup>th</sup>	696.56	699.00	+2.44	746.00	834.00	741.00	814.71	+68.71
	Below	Below		Below	Above	Below	Below	

*Note.* Reading STAR scores are listed from May and September from 2018 to 2019. Under each mean STAR score is the benchmark category of above or below benchmark. In 2018, grades six and seven dropped benchmark level and grades five and eight stayed below benchmark. In 2019, grades five, six, and seven maintained above benchmark and grade eight maintained below benchmark.

All four grade levels started the 2018 school year below benchmark. In 2019, there was no decline in benchmark category for Literacy Academy participants. Students returned to school in September at the same benchmark category that was achieved at the end of the academic year in May 2019. The only grade level at below benchmark was one of two grade levels that made overall summer learning gains. The nearly 69-point gain was still not enough to move up to the above benchmark category.

Student perspectives about their own learning during the summer was desired for this study. In the End of Summer Questionnaire, 73% of students believed that their reading skills had improved as a result of participation in the Literacy Academy. Seventy-four percent of students also felt that their reading skills had improved more in the summer months than during the previous school year.

### **Registration and Attendance**

Summer school registration information from 2015 to 2019 is reported in Table 2. In 2019, the research school still conducted its regular summer school programming with the addition of the Literacy Academy. One tenth-grade student was allowed to participate in the Literacy Academy, but the student's STAR scores were not analyzed for the study.

It must also be noted that while the school board only provided bus transportation for Literacy Academy participants living within district boundaries, the school did allow siblings of Literacy Academy participants to ride the bus. The summer school coordinator reported that 11 primary-grade students were able to attend summer school in 2019 because transportation was provided. Registrations for the Literacy Academy in 2019 increased by 746% as compared to summer school in 2018.

**Table 2**

Summer School Registrations for Years 2015 Through 2019

Grade Level	2015	2016	2017	2018	2019	Literacy Academy
1-4	18	13	24	21	40	--
5	3	6	8	5	1	33
6	5	3	5	6	2	17
7	0	3	2	2	0	39
8	7	0*	4	9	3	7
10	--	--	--	--	--	1
Total	33	25	43	41	46	97

*Note.* Eighth grade summer school was not offered in 2016. The Literacy Academy was not offered to students in grades one through four.

When compared to the total student population, Literacy Academy participants comprised 42.2% of all fifth through eighth-grade students in the district. In 2018, only nine percent of students participated in the school's summer learning program. In 2019, nearly 45% of all district fifth through eighth-grade students participated in summer learning (See Table 3).

**Table 3***Summer Learning Registration Comparison 2018 Through 2019, Grades 5-8*

Program	School Population Grades 5-8	Summer Learning Participants	Summer Learning Participation
2018 Summer School	239	22	9.2%
2019 Summer School	230	6	2.6%
2019 Lit. Academy	230	97	42.2%
2019 Summer School & Literacy Academy	230	103	44.8%

The number of registered students for the summer Literacy Academy was further broken down by grade-level and gender. Fifth grade and seventh grade had the largest participant groups. The ratio of male to female students was nearly equal (See Table 4).

**Table 4**

*Literacy Academy Registrations for 2019*

Grade	Male	Female	Total
5 <sup>th</sup>	16	17	33
6 <sup>th</sup>	7	10	17
7 <sup>th</sup>	21	18	39
8 <sup>th</sup>	4	3	7
10 <sup>th</sup>	0	1	1
Total	48	49	97

Data were analyzed to compare the retention rate, the number of registrations compared to the number of actual participants. In 2018, 13 students registered for summer school and eight students actually attended the program. In 2019, 97 students registered for the Literacy Academy and 93 participated in the program. This was a retention increase of 34.4%.

Attendance data were also compared. In 2018, students attended the voluntary 16-day program for 58% of the days. In 2019, Literacy Academy participants attended the 16-day program for 75% of the days. Not only did more students register for the Literacy Academy and actually attend the program, but the Literacy Academy also had a higher rate of attendance.

## Student and Parent Questionnaires

During the last week of the Literacy Academy, students were given the End of Program Questionnaire and asked if the bus transportation motivated them to attend the summer Literacy Academy. Of those who completed the questionnaire ( $n = 67$ ), 46% of the students acknowledged that the transportation was important. Thirty-six percent of the students indicated that it was neither important nor unimportant (See Table 5).

**Table 5**

*End of Program Student Questionnaire, Question 1: Bus Transportation Motivated Me to Attend the Literacy Academy*

Response	Frequency	Percentage
Strongly Disagree	6	9%
Disagree	6	9%
Neither Agree nor Disagree	24	36%
Agree	20	30%
Strongly Agree	11	16%

Parents also recognized transportation as a motivator to attend the Literacy Academy. In End of Summer Questionnaire open-ended question, one parent wrote, “The bus was a huge reason it made it possible for him to attend.” Another parent responded that his/her child attended summer learning in 2019 because “transportation was provided.” The parent of a child who was open enrolled at the research school recommended that transportation be provided for open enrolled students in the future.

Students were also asked if nutrition was an important motivator for participating in the Literacy Academy. Table 6 reflects the 42% of students who indicated that free breakfast and lunch was important. Individual students’ FRLP data could not be used for this study, but

the responses are similar to the elementary school's 36.5% FRLP. In the End of Summer Questionnaire, one parent noted that transportation and meals were reasons for participation in 2019.

**Table 6**

*End of Program Student Questionnaire, Question 2: Meals Motivated Me to Attend the Literacy Academy*

Response	Frequency	Percentage
Strongly Disagree	12	18%
Disagree	5	7%
Neither Agree nor Disagree	22	33%
Agree	20	30%
Strongly Agree	8	12%

Book access was another component of this study. In the End of Summer Questionnaire, students were asked if free books were motivating for attendance. Seventy-three percent of students stated that free books were motivating. Forty-nine percent of students strongly agreed that the book distribution was important (See Table 7). In the End of Summer Questionnaire, one parent wrote, "He came home and asked to join and I believe the incentives of getting books was why he wanted to." Another parent stated that her child "was excited to get free books."

**Table 7**

*End of Program Student Questionnaire, Question 3: Free Books as Motivation to Attend the Literacy Academy*

Response	Frequency	Percentage
Strongly Disagree	3	4%
Disagree	4	6%
Neither Agree nor Disagree	11	16%
Agree	16	24%
Strongly Agree	33	49%

Question one in the End of Summer Questionnaire asked students and parents if the supports motivated students to register for the Literacy Academy. Eighty-two percent of students were motivated by the supports and incentives. Eighty-six percent of parents noted that they were motivating.

Parents ( $n = 63$ ) were also asked if their child attended other learning or enrichment programs in the summer of 2019. Some parents (19%) stated that their child participated in another summer learning program. For most (81%), the Literacy Academy was the only learning program in which their child participated during the summer months.

In the End of Summer Questionnaire's open-ended questions, parents indicated their satisfaction of the Literacy Academy program and the supports that it provided for families and students. One parent wrote,

We really wanted (name) to go, but we were worried about how to get him to summer school. Then we got the letter from the Literacy Academy and we were so excited. We loved that the program would do and there was transportation provided. Couldn't ask for more.

Another parent similarly expressed that “the daily transportation was a huge incentive for us as summers are busy. Thank you for providing that!”

In terms of nutrition, one parent commented, “We loved the program and it was made so simple with the transportation and meals. I would recommend this program to all.” As for book access, one parent said that her son “came home from school asking to join and I believe the incentives of getting books was why he wanted to.” Similarly, another parent wrote that her children “heard about receiving books and couldn’t believe that someone would give them free books! Books they really wanted. They felt special I’m sure.”

Parents also addressed the enrichment focus of the summer literacy program. They wanted their children to have structured learning time, but they also wanted it presented in a more relaxed manner. One parent noted that “this was the first time ever that enrichment was offered during the summer...appreciated the best practices that were used to engage ALL students.” Another parent commented, “We loved the teaching ideas and more relaxed learning atmosphere.” Comments reflected the appreciation for a summer learning program that combined literacy skills and a more casual, but supportive learning environment.

### **Discussion**

Socioeconomic disadvantage and geographic isolation create learning obstacles for many students during the summer months. Inaccessible educational opportunities and books, as well as food insecurity can hinder students’ growth when school is closed for the summer. Struggling students may not receive the explicit instruction or attention needed to grow academically, unmotivated readers may not receive the encouragement to read, gifted readers may lack opportunities to challenge their reading skills, and multilingual learners may have limited opportunities to practice their English skills. The result is a loss of reading skills when



students are away from school (Allington, et al., 2010; Leefat, 2015). The loss of learned skills, or summer learning loss, requires students to relearn skills at the start of each school year instead of moving forward with the learning of new concepts. Since summer learning loss is also cumulative (Leefat, 2015; Shin & Krashen, 2008), building each summer, reducing summer learning loss is critical for students' long-term success.

The summer Literacy Academy was created to eliminate barriers to learning in the summer months. The faucet of resources for students was turned back on, providing all participants with free transportation to and from school, breakfast, lunch, and books to keep. Simply getting students to school was not enough; the summer learning program also needed to inspire reading and motivate regular attendance. The program model was changed from a remedial focus to an enrichment emphasis and the Literacy Academy supported students' reading growth with a curriculum that incorporated research-based instructional practices. This program emphasized positive and engaging reading experiences that prompted higher order thinking and active student engagement.

Quantitative data were derived from STAR reading assessments, registrations, attendance, and student and parent questionnaires. Qualitative data were gathered from open-ended questions on the parent questionnaires. Results from this study demonstrate the need for and effectiveness of providing literacy-focused, enrichment programming with the same resources provided during the school year.

The one-sample t-test for means indicated that the overall STAR scores for participations declined from May 2019 to September 2019. Looking at individual grades, however, summer learning gains were achieved for grades six and eight. In addition, all four grade levels returned to school in September 2019 at the same STAR benchmark level as they

did in May 2019 when school closed for the summer. In 2018, two grade levels dropped to the below-benchmark category but none of the grade levels exhibited a decline in benchmark categories in the summer of 2019. From the school's instructional planning perspective, overall summer learning loss was reduced and two grade levels experienced summer learning gains.

Students' perceptions of their learning are important for the motivation and success of readers. Parsons et al., (2018) noted that students' self-concept of reading typically declines during grades three to six, but "most notably from grade 5 to 6" (p. 518). From the Literacy Academy participants' perspectives, the program had a positive effect on their literacy learning. Seventy-three percent of participants believed that their reading skills improved as a result of their participation in the Literacy Academy. Seventy-four percent of students believe that their reading growth was greater in the summer than during the school year. Marchand-Martella, et al., (2013) noted that student motivation to read should be seen as "an integrated part of an effective adolescent literacy program" (p. 175). The participants' feelings of confidence about their summer learning was a positive step for reading motivation and literacy success.

Registrations for the new summer learning program increased by 746%, retention increased by 34%, and average daily attendance increased by 17%. Parents noted that the free transportation made it possible for their children to attend the program and the free books motivated students. The results from this study demonstrate students' need for resources during the summer months. Eighty-seven percent of high school students and 84% of elementary students relied on school-provided transportation during the school year. This need did not go away during the summer months. Thirty percent of high school students and

36.5% of elementary students received free or reduced-price lunches during the school year. Similarly, this need did not go away during the summer months as students' questionnaire responses mirrored the school's FRLP.

The Literacy Academy eliminated barriers that prevented students from accessing summer learning activities by providing transportation to and from school. The program also supported families by providing daily breakfast and lunch for students. In addition, the summer learning program eliminated barriers to book access by providing students with books to read all summer. This amalgam of supports worked together to make learning equitable for all participants.

The Literacy Academy was so successful that the school board requested that the program expand for summer 2020. As a result, the program will be open for grades 4-8 and will add one grade level each additional summer. The school board also voted to again approve bus transportation for Literacy Academy students and their siblings attending summer school.

Permission has also been granted to continue a second-year research study through the summer of 2020. Continued research is necessary to make additional improvements to the summer program. It is also desired because there are very few multi-year studies published on summer learning programs and summer programs tailored for adolescent readers. New and multi-summer research is recommended to evaluate factors that affect the reading growth of middle-school students.

Continued research for male and female readers is also recommended. In this study, male students started the summer break with a lower mean STAR score and experienced a greater learning loss than female students. For this reason, more research is needed to explore

the differences in male and female reading scores both during the school year and the summer months. In addition, attention must be focused on motivating factors for male students, specifically, and strategies that could be employed to reduce the gap in summer learning.

It is recommended that school districts take action, like the study school district, to make summer learning equitable. Students who need supports during the school year (e.g., transportation, nutrition, and book access) still depend upon those supports when school is closed for the summer months. The provision of resources demonstrated the district's commitment to students' learning all year and provided the encouragement needed to reduce summer learning loss.

It is also recommended that schools evaluate the emphasis of their summer learning programs. Changing the name from summer school to a summer literacy academy can change the initial connotation from remedial to enrichment, but the actual program has to be transformed. School districts should develop summer learning programs that emphasize growth and engagement rather than deficit and remediation.

This research project created an enrichment, literacy-focused program that made summer learning equitable for students. The faucet of resources was turned on and students' literacy growth was encouraged during the summer months. Middle-school students' participation in the school's summer learning program increased and students' summer learning loss was reduced. The results of this research demonstrate the positive outcomes that can occur when resources and programming meet the needs of students in a geographically isolated and socioeconomically disadvantaged school district.

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