

EFFECTIVE DESIGN FOR SUMMER LEARNING PROGRAMS

Introduction

Summer break represents a time filled with potential fun and excitement for students after a long school year. However, summer also represents a critical time during which students can further their learning or "lose" learning that they completed in the preceding school year.¹ In fact, many students—concentrated among historically disadvantaged populations—return to school following summer breaks "with achievement levels lower than where they were at the beginning of summer break."² Indeed, students may regress by two to three months in terms of their academic skills and content knowledge each summer, and "by the fifth grade, summer learning loss can leave low-income students two-and-a-half to three years behind their peers."³

Summer learning loss is especially problematic due to its innate widening of achievement gaps and its adverse impacts on students' literacy and numeracy.⁴ Notably, "research dating back 100 years confirms the phenomenon often referred to as 'summer slide.'"⁵

SUMMER VACATION AND LEARNING LOSS

Summer represents a challenging time for educators, families, and students in maintaining the learning gains made in the prior school year to ensure maximum readiness for the next. Research shows that many students, including those from historically disadvantaged groups, experience multiple months' worth of "lost learning" in the areas of numeracy and literacy. Thus, many districts and schools are seeking innovative ways to mitigate or eliminate summer learning loss.

Consequently, educational advocates and federal, state, and local policymakers often tout summer learning programs as an avenue to reduce achievement gaps and mitigate—or possibly eliminate and reverse—the adverse impacts of summer learning loss.⁶ In fact, research shows that, even if achievement gaps do not automatically widen during summer vacation, summer programs can help students who are behind catch up, thereby shrinking achievement gaps.⁷ Such dynamics have

lead a growing number of school districts across the country to offer or consider offering summer learning programs to combat the documented "summer slide" in cognitive skills, provide students with enrichment activities, and allow motivated students the opportunity to explore new subjects.⁸

To support Utah districts and schools in understanding the impacts of summer learning programs and launching and sustaining effective summer learning programs, Hanover Research (Hanover) and ULEAD (Utah Learning through Effective, Actionable, and Dynamic) Education have developed this research brief. Specifically, this research brief reviews literature addressing the effects of summer learning programs on student outcomes, achievement gaps, and summer learning loss and examines essential design features shared by effective summer learning programs.

Recommendations

Based on our research findings, Hanover and ULEAD recommend that Utah districts and schools consider:

-  **Providing free summer learning programs to students from low socioeconomic status** to reduce access barriers resulting from income and wealth disparities;
-  **Keeping summer learning program class sizes to a maximum of 20 students** and providing each class with a supervising lead teacher and at least two - three other adults; and
-  **Mandating at least three hours of academic instruction each day** of their summer learning programs, with the remaining time devoted to enrichment and recreational activities.

Key Findings

-  **Research indicates that summer learning programs can positively impact overall student outcomes and may potentially reduce summer learning losses.** Different forms of summer programming (e.g., voluntary, mandatory, etc.) have been shown to have positive effects on student achievement in subsequent school

years. Comparatively, research shows that the positive gains achieved via summer learning help counteract the natural losses in learning that can occur over the summer.

 **Research suggests that summer learning programs can reduce the achievement gaps experienced by students from historically disadvantaged populations.** The opportunities to participate in enriching and intellectually stimulating activities are often limited for students living in low-income households and from racial and ethnic minority groups. Given the potential positive academic impacts attributed to summer learning programs, they can support a narrowing of performance disparities experienced by historically disadvantaged student groups.

 **Summer learning programs should provide students with high-quality academic instruction for at least three hours each day.** In order to maximize student achievement, curriculum and instruction should align with curricular standards and school-year activities. Summer learning programs should also engage students through opportunities for active, hands-on learning and enrichment activities.

 **All summer learning program classes should have an experienced and trained teacher at the helm and a maximum enrollment of no more than 20 students.** Ideally, classes will have enough adult staff to establish a 5:1 student-to-staff ratio. Importantly, any staff working in the summer program should have appropriate curriculum training to best support students and the lead teacher.

outcomes, with "the benefits endur[ing] for [two] years after a student engaged in a summer program."¹²

POSITIVE GAINS FROM SUMMER LEARNING

Multiple research studies record promising findings that indicate summer learning programs can be used to address existing achievement gaps experienced by students, improve students' overall academic performance, and counteract learning losses that may occur naturally over the summer.

Several high-quality studies highlight the positive academic impacts of summer learning. For example, a randomized control trial of summer learning programs in five urban districts conducted by the RAND Corporation finds that summer learning programs had positive effects on the achievement of Grade 3 students. Overall, the researchers find that students in the treatment group (i.e., those enrolled in the summer learning program) experienced a statistically significant increase in their math achievement. The study also highlights the importance of attendance, finding that higher levels of attendance are associated with larger impacts. The researchers find that students who attended a five- to six-week summer learning program for 20 or more days in 2013 achieved at a higher level on state math assessments than control group students. These results were statistically significant and held through the next school year. In 2014, students with high attendance rates had statistically significant higher achievement than the control group in mathematics and language arts.¹³

Comparatively, a 2013 meta-analysis of summer reading interventions that synthesized the results of 35 experimental or quasi-experimental studies (and 41 reading interventions) finds that summer reading programs have a positive impact on the reading skills of students in Grades K-8. Specifically, the researchers find that combined, classroom-based and home-based programs had statistically significant impacts on multiple reading outcomes, as presented in the table below.¹⁴

Effect Sizes for Summer Reading Program Outcomes

OUTCOME	EFFECT SIZE
Total Reading Achievement	0.10
Reading Comprehension Total	0.13
Reading Comprehension Only	0.23
Fluency and Decoding Combined	0.24
Reading Vocabulary	0.04

Source: *Review of Educational Research*¹⁵

Program Impacts

Academic Achievement Gains

Research indicates that summer learning programs can positively impact overall student outcomes and may potentially reduce summer learning losses.⁹ It is important to note that the research on the positive impacts of summer learning programs have met the qualifying criteria to be considered "promising" under the Every Student Succeeds Act.¹⁰ In fact, "a body of research has documented that summer learning programs can be effective in improving student achievement and providing enrichment activities such as sports, arts, and science exploration for low-income students."¹¹ Notably, research finds that "[v]oluntary, mandatory, and home-based summer programs all [have] positive effects" on student

Reduced Achievement Gaps

Compared to their peers from higher-income backgrounds, low-income students experience "fewer opportunities for cultural, athletic, and other stimulating summer activities."¹⁶ At the same time, research indicates that summer learning loss during elementary school contributes to at least half of the reading achievement gap students experience in Grade 9.¹⁷ Given the disparity in summer learning opportunities, many districts and schools seek to use summer programs as a means to help disadvantaged students combat summer learning loss and narrow performance gaps with peers from more advantaged groups.¹⁸

Research suggests that summer learning programs can reduce the achievement gap between students of different socioeconomic groups by providing high-quality academic and enrichment experiences that mitigate achievement gaps. Specifically, the previously mentioned RAND study emphasizes that "summer learning programs have the potential to mitigate the academic achievement gap between students from low-income and higher-income households."¹⁹ Comparatively, guidance from the National Summer Learning Association emphasizes that time spent in summer learning programs improves opportunities for all children and is especially "instrumental in closing the achievement gap between privileged children and less-resourced children."²⁰

Studies on the impact of summer learning programs on the achievement gap focus almost exclusively on the socioeconomic achievement gap and reducing gaps between students from low-income and higher-income backgrounds.²¹ Despite research that focuses only on the socioeconomic achievement gap, **summer learning programs provide benefits to students from traditionally underrepresented racial and ethnic groups.** The Afterschool Alliance explains that "[t]he need for[...]summer learning programs is especially vital in African-American and Latin[x] communities, communities that are experiencing higher levels of poverty, homelessness[,] and food insecurity, and are facing disparities in education and access to extracurricular activities."²² They note that summer learning programs can benefit African-American and Latinx communities by:²³

- Ensuring children have access to academically enriching activities, helping close the opportunity gap between higher-income and lower-income families;
- Tackling the achievement gap between white students and African-American and Latinx students by increasing attendance, homework completion, and

engagement in school, ultimately raising graduation rates and test scores;

- Combating food insecurity among children by providing nutritious snacks and meals, which are especially important during the summer months when schools are out of session; and
- Providing working parents with peace of mind knowing that their child is in a safe and supervised space during the out-of-school hours.

Features of High-Quality Programs

Research finds that effective summer learning programs share common features, such as those recorded in the table below and in the table on pp. 6-7. Many of the listed practices and program elements focus on structural design features, such as class size and staff ratios, as well as process features such as opportunities for learning and enrichment and hands-on activities. In contrast to these features of effective programs, research shows that ineffective and failed summer programs also share common characteristics, including limited academic focus, short program duration, little advanced planning, and loose organization.²⁴

Features of Effective Summer Learning Programs

- Aligned school-year and summer curricula
- A broad array of enrichment opportunities
- Rigorous programming, inclusive of engaging, hands-on activities
- Group learning that is complemented by individual support
- Learning is grounded in a real-world context
- Opportunities for skill-building and mastery
- Intentional relationship building
- The inclusion of youth voice
- Academic classes that are limited to 15 students, with at least two adults
- High-quality instruction
- Hiring effective and motivated teachers and providing professional development
- Practices to maximize participation and attendance.

Source: Multiple²⁵

High-Quality Curriculum and Instruction

Summer learning programs require a high-quality curriculum to effectively improve student outcomes. Specifically, in their evaluation of summer learning programs, the RAND Corporation finds that districts encounter many challenges with developing their own curriculum for summer learning and, thus recommends that districts use an evidence-based,

commercially-available curriculum. Notably, their external curriculum reviewers find that districts with the strongest curricula are those that implement a purchased, commercial program, rather than those that create their own. The researchers note that while purchased curricula are not necessarily superior to district-designed curricula, the challenges districts face with creating their own curricula for summer programs often result in lower-quality work.²⁶

To maximize student achievement, curriculum and instruction in summer learning programs should align with curricular standards and school-year activities. Research from Child Trends finds that effective summer learning programs teach content that aligns with grade-level curricular standards for language arts and mathematics.²⁷ Districts can involve curriculum experts to help ensure that the summer learning curriculum aligns with the school-year curriculum and that both curricula are structured around the same principles and goals.²⁸ While aligning with standards, curricular activities and instruction should complement and extend the content and activities students learn during the school year.²⁹ Districts should also ensure that “teachers have a clear understanding of the standards to which they are expected to teach and the time they are expected to spend on instruction.”³⁰ Additionally, the curriculum should align with both students’ interests and their needs in order to maintain student engagement and target improvement efforts.³¹

Other recommendations for curriculum and instruction include providing teachers with materials for differentiating instruction and standardizing the curriculum across district sites, as discussed below.

Recommendations for Curriculum and Instruction

PROVIDE MATERIALS FOR DIFFERENTIATING	STANDARDIZE CURRICULA ACROSS SITES
Districts should provide teachers with materials for differentiating lessons to meet students’ needs.	Districts should expose students to the same skill development and amount of instruction across sites.

Source: RAND Corporation³²

Summer learning programs should also engage students through opportunities for active, hands-on learning. Research suggests that effective programs provide instruction that actively engages students in the material through hands-on learning activities that spark their interest and have real-world applications. Indeed, interactive instruction and experiential learning can engage students.³³

In addition, districts should provide students with enrichment activities that are interesting, relevant, and engaging for students. Enrichment may also offer time for sports or opportunities for students to engage in physical activity.³⁴ While not all enrichment activities need to align with academic content, experts recommend that summer learning programs integrate academic and enrichment experiences to increase student engagement and hands-on learning. Moreover, enrichment activities offer a variety of benefits to summer learning programs, such as:³⁵

- Attracting students to the program;
- Differentiating the program from traditional summer school;
- Improving attendance;
- Providing students from low-income families with experiences they may not otherwise receive;
- Assisting students’ personal development; and
- Augmenting academic experiences.

Class Sizes and Staffing

Effective summer learning programs have small class sizes and low teacher-to-student ratios.

Research indicates that teachers struggle to meet students’ needs in large classes, even with a second adult in the classroom, and that small class sizes effectively contribute to improved summer learning outcomes. For example, small class sizes in summer learning programs can:³⁶

- Facilitate opportunities for small-group instruction;
- Provide teachers with more time to provide individualized and differentiated instruction to meet students’ needs; and
- Allow teachers to get to know their students better within the shorter timeframe of summer learning programs.

Specific recommendations for maximum class size vary from 10 to 20 students per class. Similarly, recommendations for adult-to-student ratios also vary, with research from Child Trends suggesting a 1:5 adult-to-student ratio with one lead teacher and one teaching assistant per class, or two to four adults per classroom, with one adult being a trained teacher.³⁷

Essentially, **all summer learning program classes should have an experienced and trained teacher at the helm.**³⁸ If using aides or paraprofessionals, districts must provide these adults with training on the curriculum so they can effectively support student learning.³⁹

Duration and Time Allocation

Summer learning programs must be of sufficient duration and provide an adequate number of hours of academic programming to support students.⁴⁰

Specifically, summer learning programs should operate for five to six weeks and provide between three and four hours of academic activities each day.⁴¹ In addition to this guidance, factors districts should consider when determining program duration include:⁴²

- Budget;
- Time needed for school-year preparations (e.g., time to close down the prior school year);
- Time to prepare for the next school year; and
- Time to ensure school facilities receive summer maintenance.

In addition to program duration, experts emphasize the importance of maximizing academic time on task each day for improving student outcomes. Within the recommended three to four hours of daily instructional time, researchers recommend allocating at least two hours to literacy instruction—with a combination of whole-group and small-group instruction four to five times per week—and scheduling 60 to 90 minutes of mathematics instruction per day.⁴³

Experts also highlight the difference between allocated time (i.e., “the time on the school calendar for a given content area”) and academic learning time (i.e., “the amount of time students spend working on rigorous tasks at the appropriate level of difficulty”).⁴⁴ Because academic learning time can predict student achievement better than allocated time, how programs and teachers use time in the classroom is essential to program and student outcomes.⁴⁵ Notably, the RAND study found that teachers often struggle to meet time-on-task goals due to time spent on non-instructional tasks, inadequate class duration, and transition time between classes.⁴⁶ Thus, districts can implement the following practices to encourage a focus on academic content during academic learning time:⁴⁷

- Allowing time for transitions in the master schedule;
- Scheduling academic classes to occur in one continuous block;
- Minimizing the loss of instructional time by attending to summer site logistics;
- Communicating the importance of maximizing instructional time to site leaders; and
- Providing teachers with strategies for maximizing instructional time.

Recommendations and Considerations for Starting and Sustaining a Summer Learning Program

PLANNING: *Launching a summer program is akin to starting a new school year but with less time for planning and execution. Good planning may be the most important characteristic of a strong program. It reduces logistical problems and increases instructional time.*

Start early and be inclusive.

- Commit to having a summer program by January
- Include district and site-level staff in planning
- Centralize some decision-making
- Deliver planning templates to site leaders

Meet regularly and be comprehensive in scope

- Conduct regular and productive meetings before the program starts
- Plan for enrichment activities as well as academics

Clearly delineate roles among program leaders, external partners, and summer site leaders

- Determine who will plan for what and who will be responsible for what during the summer

Establish firm enrollment deadlines and keep electronic student records

CURRICULUM AND INSTRUCTION: *Summer programs are short and often provide little time for teachers to plan their lessons. To maximize the effectiveness of instruction, teachers must have high-quality curricular materials matched to student needs and small class sizes.*

Anchor the program in a commercially available and evidence-based curriculum

Standardize the curriculum across district sites

Include strategies for differentiation in curriculum materials to accommodate at least two ability levels

Structure the program to ensure sufficient time on task

Instruct students in small classes or groups

Provide support to students with special needs

TEACHER SELECTION AND TRAINING: *Teaching quality has the largest school-based impact on student outcomes of any factor. Hiring effective teachers and giving them the support they need are critical steps to maximizing student achievement.*

Recruit and hire the right teachers

- Develop rigorous selection processes to recruit motivated teachers
- Consider teachers' school-year performance in hiring decisions
- Hire teachers with grade-level and subject-matter experience and, if possible, familiarity with the enrolled or expected-to-enroll students
- Negotiate with teachers' unions, if necessary, to establish a competitive selection process

Give teachers sufficient training and ongoing support

- Familiarize teachers with the summer curriculum and how to teach it
- Help teachers tailor the curriculum for students with different aptitudes
- Provide ongoing support to implement the curriculum
- Include all instructional support staff in academic training sessions
- Give teachers time to set up their classrooms in advance

ENRICHMENT ACTIVITIES: *Districts should include fun and engaging enrichment activities such as the arts, sports, and science exploration to differentiate their programs from traditional summer school and to attract students and promote attendance.*

Keep class sizes small and select providers with well-qualified staff who have experience in behavior management

Conduct careful planning if enrichment is supposed to be integrated with academics

ATTENDANCE: Research has confirmed the common-sense notion that in order for students to benefit from summer programs, they must attend regularly.

Set enrollment deadlines

Establish a clear attendance policy

Provide field trips and other incentives for students who attend

Keep in mind it is not necessary to disguise academics to boost attendance

TIME ON TASK: The ultimate goal of summer learning programs is to improve academic achievement. Besides providing high-quality instruction and achieving good attendance, a program needs to be structured to provide a sufficient amount of time on academics to improve performance.

Operate the program for five to six weeks

Schedule three to four hours a day for academics and focus on academic content during those hours

PROGRAM COST AND FUNDING: Cost is a key barrier in creating and sustaining summer learning programs. However, districts should seek to better estimate and minimize costs and maximize the value of their investment in summer learning.

Design the summer program with costs in mind

- To control fixed costs, avoid assigning small numbers of students to many sites
- Use enrichment providers to help leverage additional funds and provide a full-day program
- Hire staff to achieve desired student-to-adult ratios based on projected daily attendance, not initial enrollees
- Operate full-day programs for five to six weeks

Put resources into tracking and boosting attendance

Use effective cost-accounting practices

- To understand costs per student served, express them on a per-enrollee basis and a per-attende, per-hour basis
- Set up data procedures to enable cost tracking on a per-attende, per-hour basis

Source: RAND Corporation and The Wallace Foundation⁴⁸

Endnotes

- ¹ "Making the Move from Summer Reading to Summer Learning." Association for Library Service to Children. American Library Association. <http://www.ala.org/alsc/making-move-summer-reading-summer-learning>
- ² Quinn, D.M. and M. Polikoff. "Summer Learning Loss: What Is It, and What Can We Do About It?" Brookings Institution, September 14, 2017. <https://www.brookings.edu/research/summer-learning-loss-what-is-it-and-what-can-we-do-about-it/>
- ³ [1] "Summer Learning." United Way. <https://www.unitedwayglv.org/see-the-impact/education/summer-learning> [2] "Why Summers Matter." National Summer Learning Association. <https://www.summerlearning.org/the-challenge/>
- ⁴ "At a Glance: The Achievement Gap, Summer by the Numbers." National Summer Learning Association. <https://www.summerlearning.org/at-a-glance/>
- ⁵ "Summer Learning: Moving from the Periphery to the Core." *The Progress of Education Reform*, 10:3. p. 1. <http://www.ecs.org/clearinghouse/80/99/8099.pdf>
- ⁶ "Summer Learning." The Wallace Foundation. <https://www.wallacefoundation.org/knowledge-center/summer-learning/pages/default.aspx>
- ⁷ von Hippel, P.T. "Is Summer Learning Loss Real?" *Education Next*, 19:4, 2019. <https://www.educationnext.org/is-summer-learning-loss-real-how-i-lost-faith-education-research-results/>
- ⁸ McCombs, J.S. et al. "Making Summer Count: How Summer Programs Can Boost Children's Learning." RAND Corporation and The Wallace Foundation, 2011. pp. 17–18.
- ⁹ Ibid., pp. 27–28.
- ¹⁰ Pitcock, S. "The Case for Summer Learning: Why Supporting Students and Families All Year Is Vitally Important." *American Educator*, 2018. p. 6. https://www.aft.org/sites/default/files/ae_spring2018_pitcock.pdf
- ¹¹ Schwartz, H.L., J.S. McCombs, C.H. Augustine, et al. "Getting to Work on Summer Learning: Recommended Practices for Success." RAND Corporation and The Wallace Foundation, 2013. p. 3. <https://www.wallacefoundation.org/knowledge-center/Documents/Getting-to-Work-on-Summer-Learning-Recommended-Practices-for-Success.pdf>
- ¹² Huggins, G. "The Promise of Summer Learning." The Expanded Learning and Afterschool Project. <https://www.expandinglearning.org/expandingminds/article/promise-summer-learning>
- ¹³ Augustine, C.H., J.S. McCombs, J.F. Pane, et al. "Learning from Summer: Effects of Voluntary Summer Learning Programs on Low-Income Urban Youth." RAND Corporation, 2016. pp. ix–xvi.
- ¹⁴ Kim, J.S. and D.M. Quinn. "The Effects of Summer Reading on Low-Income Children's Literacy Achievement from Kindergarten to Grade 8: A Meta-Analysis of Classroom and Home Interventions." *Review of Educational Research*, 83:3, September 2013. p. 386. Accessed via SAGE Journals.
- ¹⁵ Figure data taken directly from: Ibid., p. 409.
- ¹⁶ Augustine, McCombs, Pane, et al., Op. cit., p. ix.
- ¹⁷ "NCASE Summer Learning Brief." National Center on Afterschool and Summer Enrichment, 2016. p. 1. <http://www.summerlearning.org/wp-content/uploads/pdf/ncase-summer-learning-brief.pdf>
- ¹⁸ McLaughlin, B. and J. Smink. "Why Summer Learning Deserves a Front-Row Seat in the Education Reform Arena." New Horizons for Learning | Johns Hopkins University, May 2010. <http://archive.education.jhu.edu/PD/newhorizons/Journals/spring2010/why-summer-learning/index.html>
- ¹⁹ Augustine, McCombs, Pane, et al., Op. cit., p. 9.
- ²⁰ "Summer Opportunities: A Research Agenda." National Summer Learning Association, 2018. p. 3. <https://www.summerlearning.org/knowledge-center/summer-opportunities-a-research-agenda/>
- ²¹ [1] Alexander, K.L., D.R. Entwisle, and L.S. Olson. "Lasting Consequences of the Summer Learning Gap." *American Sociological Review*, 72:2, April 2007. p. 167. https://www.ewa.org/sites/main/files/file-attachments/summer_learning_gap-2.pdf [2] Little, C.A. et al. "Early Opportunities to Strengthen Academic Readiness: Effects of Summer Learning on Mathematics Achievement." *Gifted Child Quarterly*, 62:1, January 2018. p. 83. Accessed via SAGE Journals. [3] Augustine, McCombs, Pane, et al., Op. cit., p. iii.
- ²² "The Importance of Afterschool and Summer Learning Programs in African-American and Latino Communities." Afterschool Alliance, July 2013. p. 1. <https://files.eric.ed.gov/fulltext/ED546834.pdf>
- ²³ Figure text quoted verbatim, with minor adaptations, from: Ibid., p. 2.
- ²⁴ "Summer Starts in September." National Summer Learning Association, June 2016. p. 19. https://bostonbeyond.org/wp-content/uploads/2016/06/ss_in_s_sample_pages.pdf
- ²⁵ Figure adapted from: [1] Terzian, M. and K.A. Moore. "What Works for Summer Learning Programs for Low-Income Children and Youth: Preliminary Lessons from Experimental Evaluations of Social Interventions." *Child Trends*, September 2009. pp. 3–5. <https://www.childtrends.org/wp-content/uploads/2009/09/2009-41WWSummerLearning.pdf> [2] McLaughlin, B. and S. Pitcock. "Building Quality in Summer Learning Programs: Approaches and Recommendations." National Summer Learning Association, September 2009. pp. 5–6. <https://www.wallacefoundation.org/knowledge-center/documents/building-quality-in-summer-learning-programs.pdf> [33] "Summer Starts in September," Op. cit., p. 19.
- ²⁶ Schwartz, McCombs, Augustine, et al., Op. cit., pp. 17–19.
- ²⁷ Terzian and Moore, Op. cit., p. 3.
- ²⁸ Schwartz, McCombs, Augustine, et al., Op. cit., p. 19.
- ²⁹ [1] Terzian and Moore, Op. cit., p. 3. [2] McEachin, A., C.H. Augustine, and J.S. McCombs. "Effective Summer Programming: What Educators and Policymakers Should Know." *American Educator*, 42:1, 2018. p. 10. <https://files.eric.ed.gov/fulltext/EJ1173313.pdf>
- ³⁰ Schwartz, McCombs, Augustine, et al., Op. cit., p. 20.
- ³¹ McEachin, Augustine, and McCombs, "Effective Summer Programming: What Educators and Policymakers Should Know," Op. cit., p. 10.
- ³² Figure adapted from: Schwartz, McCombs, Augustine, et al., Op. cit., pp. 20–21.
- ³³ [1] Bittner, R. "Connecting the Dots: Making the Most of After-School and Summer Learning Programs." National Association of Elementary School Principals, January 2018. <https://www.naesp.org/principal-supplement-januaryfebruary-2018-after-school-learning/connecting-dots> [2] Terzian and Moore, Op. cit., p. 4.
- ³⁴ Terzian and Moore, Op. cit., p. 3.

-
- ³⁵ Bulleted text adapted from: Augustine, McCombs, Schwartz, et al., "Getting to Work on Summer Learning: Recommended Practices for Success," Op. cit., pp. 29–31, 33.
- ³⁶ Preceding and bulleted text adapted from: [1] Terzian and Moore, Op. cit., p. 3. [2] McEachin, Augustine, and McCombs, "Effective Summer Programming: What Educators and Policymakers Should Know," Op. cit., p. 10.
- ³⁷ [1] McEachin, Augustine, and McCombs, "Effective Summer Programming: What Educators and Policymakers Should Know," Op. cit., p. 3. [2] Terzian, M., K.A. Moore, and K. Hamilton. "Effective and Promising Summer Learning Programs and Approaches for Economically-Disadvantaged Children and Youth." *Child Trends and The Wallace Foundation*, July 2009. p. 17. <https://www.wallacefoundation.org/knowledge-center/documents/effective-and-promising-summer-learning-programs.pdf>
- ³⁸ Terzian, Moore, and Hamilton, Op. cit., p. 17.
- ³⁹ Schwartz, McCombs, Augustine, et al., Op. cit., p. 21.
- ⁴⁰ [1] McEachin, Augustine, and McCombs, "Effective Summer Programming: What Educators and Policymakers Should Know," Op. cit., p. 11. [2] Schwartz, McCombs, Augustine, et al., Op. cit., p. 40.
- ⁴¹ Schwartz, H. et al. "Getting to Work on Summer Learning: Recommended Practices for Success, 2nd Ed." RAND Corporation and The Wallace Foundation, 2018. p. 30. https://www.rand.org/pubs/research_reports/RR366-1.html
- ⁴² Bulleted text adapted from: Schwartz, McCombs, Augustine, et al., Op. cit., p. 40.
- ⁴³ [1] Ibid., pp. 40–41. [2] McEachin, Augustine, and McCombs, "Effective Summer Programming: What Educators and Policymakers Should Know," Op. cit., p. 11.
- ⁴⁴ McEachin, Augustine, and McCombs, "Effective Summer Programming: What Educators and Policymakers Should Know," Op. cit., p. 11.
- ⁴⁵ McEachin, A., C.H. Augustine, and J. McCombs. "Effective Summer Programming: What Educators and Policymakers Should Know." *American Educator*, 42:1, January 1, 2018, p. 11.
- ⁴⁶ Augustine, C.H., J.S. McCombs, H.L. Schwartz, et al. "Getting to Work on Summer Learning: Recommended Practices for Success." RAND Corporation, 2013. p. 21. <https://www.wallacefoundation.org/knowledge-center/Documents/Getting-to-Work-on-Summer-Learning-Recommended-Practices-for-Success.pdf>
- ⁴⁷ Bulleted text quoted verbatim, with minor adaptations, from: Schwartz et al., Op. cit., p. xi.
- ⁴⁸ Figure text quoted verbatim, with minor adaptations, from: Schwartz, McCombs, Augustine, et al., Op. cit., pp. xiii–xv.