

A Practitioners Guide to Responding to COVID-19 Series: *The Impacts of Extended Learning Programs on Academic Achievement*

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Report Navigation

This Information Request (IR) report contains a navigation scheme that is visible in the sidebar on the left side of the document (to display, from the tool bar, select for PC: View > Show > Navigation Pane or for Mac: View > Sidebar > Navigation). From within the navigation, click the desired section heading or subheading to move to that particular area of the report. The IR is organized into the following sections:

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Background

Three state education agencies (SEA) that are served by Region 7 Comprehensive Center (R7CC) have been working diligently to provide guidance and support to their respective school districts as the impacts of COVID-19 become apparent to each school system. In response to questions and concerns about COVID-19 from state leadership within Region 7, a series annotated bibliographies was created to inform stakeholders about the potential impact of increased out-of-school time and possible strategies to mitigate harm to students’ academic development. The purpose of the series of bibliographies is to address three main questions.

Question 1: What will the impact of COVID-19 be on out-of-school learning loss?

Question 2: What impact do extended learning programs (summer school, after school programs, extended school day, or year-round school) have on student academic achievement?

Question 3: What initiatives have demonstrated success in offsetting out-of-school learning loss?

This bibliography will address the second of the three questions. Once shared with each SEA, they will then be distributed to LEAs for consideration as they refine their district and school continuity plans for the 2020-2021 school year.

There are 44 annotations included in this series of bibliographies, 11 of which are related to the second question. The organization within each section (articles or subsections) of the report is by ESSA level of evidence. However, within each level of evidence, organization is not intended to convey meaning. ESSA levels of evidence and What Works Clearinghouse designations are provided as a quick reference to readers.

Procedure

To locate resources for this series of reports, the R7CC Information Request team conducted online searches across three primary databases (ERIC, IES, and Google Scholar). In order to create the body of literature for review, researchers began with three search terms (“summer slide,” “summer melt,” and “summer learning loss”). The term “summer melt” was deleted from the search because it was associated with the summer between high school and college. The searches produced over 1,000 possible publications to create the final pool of 132 unique publications. Upon review of 132 resources located in the above searches, the team selected 44 for inclusion in this series of reports, based on these criteria: (a) publication date within the past 10 years, unless they were perceived as seminal works (e.g., Cooper et al., 2000) by the research team; (b) initiatives, programs, and studies that produced statistically significant, positive effects were included; and/or (c) content relevant to the client’s topics of interest. Detailed information on the selected resources is provided in the Resource Summaries section of this report, which follows the Overview.

In order to provide a reference for the quality of evidence presented in this bibliography, the researchers assigned each relevant publication to one of the four levels of evidence provided in the Every Student Succeeds Act guidance. Every relevant article was coded by two of the four authors. When the authors disagreed on a suggested level of evidence, they discussed the

General Limitations

As with many topics in education, there is a limited research base of information on extended learning programs and their impact on student learning after the COVID-19 related learning loss. However, resources cited in this summary include a few research-based strategies and practices grounded by strong, moderate, and promising evidence as defined by the criteria established in the ESSA guidance.

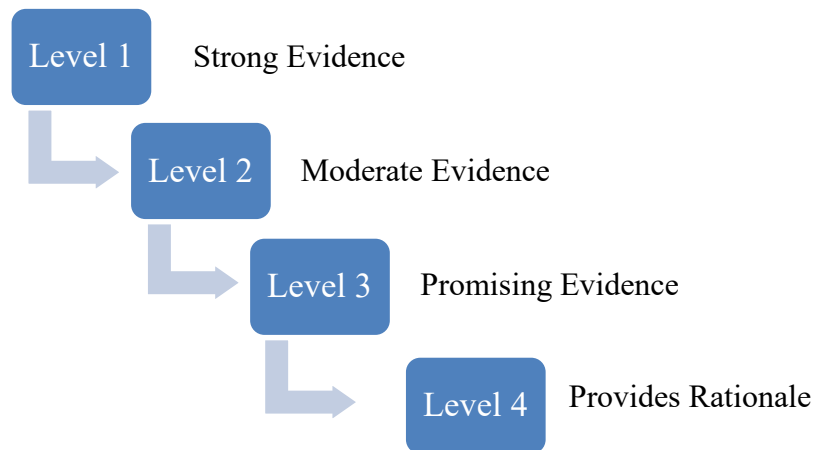
The ESSA Levels of Evidence indicators are meant as guidance to state and local administrators. Two of the four authors are certified reviewers of What Works Clearinghouse standards in group design. Even with this level of expertise and guidance, the authors cannot ensure outside entities will agree with these designations.

Overview

This report centers around a review of resources that discuss out-of-school learning loss. Summer learning loss occurs for most students. As a result of increased out-of-school time due to COVID-19, schools should expect students to return in the fall with a much wider range of knowledge. Also, the average knowledge of incoming students is likely to be lower than prior years due to more out-of-school time because of COVID-19.

In the Resource Summaries section, each resource summary includes the title, ESSA level of evidence (1=strong evidence, 2=moderate evidence, 3=promising evidence, 4=demonstrates a rationale), and an overview.

ESSA Levels of Evidence



Resource Summaries

The 11 selected resources relevant to this research question are listed by ESSA level of evidence within each of the three subtopics:

- The impacts of extended learning programs on academic achievement
- Summer learning
- Year-round education
- Afterschool programs

The impacts of extended learning programs on academic achievement

1. Kidron, Y., & Lindsay, J. (2014). *The effects of increased learning time on student academic and nonacademic outcomes: Findings from a meta-analytic review* (REL 2014-015). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Education Laboratory Appalachia. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/appalachia/pdf/REL_2014015.pdf

Level of Evidence: ESSA Level 1

Overview

Kidron and Lindsay (2014) performed a meta-analysis of 30 studies of increased learning time programs (i.e., out-of-school, summer, extended learning time, and year-round schools). The authors found increased learning time has a positive effect on students' academic motivation, but not on their literacy or math achievement. Within increased learning time programs, certified teachers had a positive impact on literacy and math achievement. However, increased learning time programs had a statistically significant and substantively important positive effect on literacy achievement for students performing below standard on the social-emotional skill development of students with ADHD and on the literacy achievement of students in suburban locations. For elementary students, increased learning time programs had a statistically significant positive effect on literacy and math achievement, but the effect size was small (about 0.07 SD). For middle school students, there was no impact on math and a small, negative effect on literacy achievement. The authors recommend certified teachers lead increased time programs, programs are matched to their context, and certain student subgroups are targeted including students struggling to meet grade-level literacy standards or students with ADHD.

Summer Learning

- Kim, J. S., & Quinn, D. M. (2013). 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, 386-431. doi: [10.3102/0034654313483906](https://doi.org/10.3102/0034654313483906)

Level of Evidence: ESSA Level 1

Overview

Kim and Quinn (2013) conducted a meta-analysis of 41 classroom- and home-based summer reading interventions in the U.S. and Canada from 1998 to 2011 delivered to Kindergarten–Grade 8 students. A small, positive effect was found on composite reading achievement though the effect was moderate for decoding ability and small for reading vocabulary. The authors found that research-based summer programs produced small- to medium-sized effects in reading improvement for students compared to the small effects for summer programs that were not research-based. The mean reading effects for students from low SES backgrounds were 0.28 SDs higher than students from mixed income backgrounds.

- Quinn, D. M., & Polikoff, M. (2017). *Summer learning loss: What is it, and what can we do about it?* Washington, DC: The Brookings Institution. Retrieved from <https://www.brookings.edu/research/summer-learning-loss-what-is-it-and-what-can-we-do-about-it/>.

Level of Evidence: ESSA Level 3

Overview

Quinn and Polikoff (2017) provide a brief overview of summer learning loss and characteristics of successful summer programs. The authors review two meta-analyses of summer learning and provide a review of two home-based summer programs that have demonstrated promising results and may be less expensive than school-based programming. The authors recommend extended learning programs (a) use evidence-based instruction (e.g., literacy instructional strategies identified by the National Reading Panel), (b) include hands-on and recreational activities, (c) provide students sufficient time on academic tasks, and (d) hire the most effective teachers and/or provide professional development to summer school staff. The authors also identified consistent attendance was an important indicator for effectiveness. Schools investing in summer programming should also consider investing in attendance strategies to increase return on investment.

- Schwartz, H. L., McCombs, J. S., Augustine, C. H., & Leschitz, J. T. (2018). *Getting to work on summer learning: Recommended practices for success*, (Second Edition). Santa Monica, CA: RAND Corporation. Retrieved from <https://www.wallacefoundation.org/knowledge-center/Documents/Getting-to-Work-on-Summer-Learning-2nd-ed.pdf>

Level of Evidence: ESSA Level 3

Overview

Schwartz, McCombs, Augustine, and Leschitz (2018) updated the Wallace Foundation 2013 guidance to school district leaders and their partners who are interested in launching summer learning programs or improving established ones. This report presents recommendations based on evaluations, conducted between 2011 and 2016, of summer programs in five urban school districts—Boston (Massachusetts); Dallas (Texas); Duval County (Florida); Pittsburgh (Pennsylvania); and Rochester (New York). These recommendations were produced for the National Summer Learning Project (NSLP), a multiyear assessment of the effectiveness of voluntary, district-led summer learning programs offered at no cost to low-income, urban, elementary students. The main recommendations for summer programs were to use teachers who possess the necessary content knowledge, use rigorous academic curricula, provide high-quality enrichment experiences, include a high level of engagement between adults and students, and focus on consistent attendance.

- Perry, M., Khalilnaji-Otto, N., & Brackenridge, K. (2018). *Summer learning – A smart investment for California school districts* (PACE Continuous Improvement Brief 01-18). Stanford, CA: Stanford Graduate School of Education, Policy Analysis for California Education. Retrieved from <https://files.eric.ed.gov/fulltext/ED591096.pdf>

Level of Evidence: ESSA Level 4

Overview

Perry, Khalilnaji-Otto, and Brackenridge (2018) provide suggestions on summer learning programs in California in this policy brief. The authors point to the ability of summer programs to improve student achievement and engagement based on local districts' data. Suggestions for summer learning programs are discussed including curriculum, pedagogy, administrative support, planning, and budgeting. The authors also advocated that summer programs be designed to resemble camps, emphasizing enrichment activities and relationships with academic content and remediation integrated, rather than summer school. The brief includes many examples of activities in districts throughout the state as well as a short list of resources.

6. National Academies of Sciences, Engineering, and Medicine. (2019). *Shaping summertime experiences: Opportunities to promote healthy development and well-being for children and youth*. Washington, DC: The National Academies Press. doi: [10.17226/25546](https://doi.org/10.17226/25546)

Level of Evidence: ESSA Level 4

Overview

Shaping Summertime Experiences examines the impact of summertime experiences on the developmental trajectories of school-age children and youth across four areas of well-being: academic learning, social and emotional development, physical and mental health, and health-promoting and safety behaviors. It also reviews the state of science and available literature regarding the impact of summertime experiences. In addition, this report provides recommendations to improve the experiences of children over the summertime such as extending current school programming into summer months and ensuring special attention to less advantaged students.

Year-round education

7. Fitzpatrick, D., & Burns, J. (2019). Single-track year-round education for improving academic achievement in U.S. K-12 schools: Results of a meta-analysis. *Campbell Systematic Reviews*, 15, 1-28. doi: [10.1002/cl2.1053](https://doi.org/10.1002/cl2.1053)

Level of Evidence: ESSA Level 3

Overview

Fitzpatrick and Burns (2019) performed a meta-analysis of 30 studies published between 2001 to 2016 of K-12 to determine the effect of single-track year-round education (YRE) and academic achievement. The authors defined YRE as an academic intervention in which all students attend school on a common calendar that reallocates 180 instructional days without accompanying extended instructional time. Students at single-track YRE schools show modestly higher test scores in math and reading than students in traditional-calendar schools, but no difference in proficiency rates. This gain is equal to slightly more than 1 month of learning in reading and slightly less than that in math. Because schools with shortest summer breaks made the greatest academic gains, Fitzpatrick suggested schools target students who are struggling for supplementary instruction during the frequent vacation weeks (i.e., extended-year school).

8. Johnson, O., & Wagner, M. (2017). Equalizers or enablers of inequality? A counterfactual analysis of racial and residential test score gaps in year-round and nine-month schools. *The ANNALS of the American Academy of Political and Social Science*, 674, 240-261. Retrieved from https://pdfs.semanticscholar.org/b070/8880f1488e19ef41bce72546e41390e436b5.pdf?_ga=2.213343376.563033910.1587719253-1654213861.1587485137

Level of Evidence: ESSA Level 3

Overview

Johnson and Wagner (2017) compared reading and math performance among first graders attending year-round and traditional-calendar schools to determine if year-round schools are effective in reducing gaps in test scores. Unique to this study among other year-round education studies, the researchers also considered how neighborhood qualities contributed to the academic effects of year-round schools versus traditional-calendar schools. The authors found that children in year-round schools perform worse and gain the least during the traditional 9-month period, likely because the longer and more frequent breaks for year-round schools result in less learning time overall during those 9 months. Notably, African Americans were the only race/ethnic group that gained more in year-round schools than in 9-month schools in reading and math. While these gains did not eliminate the gap between African American students in year-round schools and white students in traditional-calendar schools, the gap was nearly eliminated in math while the reading gap was cut by over half (from 8.23 to 3.58 points).

9. Graves, J., McMullen, S., & Rouse, K. (2013). Multi-track year-round schooling as a cost saving reform: Not just a matter of time. *Education Finance and Policy*, 8, 300-315. doi: [10.1162/EDFP_a_00097](https://doi.org/10.1162/EDFP_a_00097)

Level of Evidence: ESSA Level 4

Overview

Graves, McMullen, and Rouse (2013) reviewed data from California and Wake County, North Carolina to determine the effects of year-round schooling. Year-round schooling could result in some savings to districts and may be a positive solution for over-crowded schools. However, no positive impacts on student achievement were found, and negative effects were found for at-risk students.

10. Dessoff, A. (2011). Is year-round schooling on track? *District Administration*, 47, pp. 34-36, 40-41.

Level of Evidence: ESSA Level 4

Overview

Dessoff (2011) provides a short, policy review about year-round schooling options for district administrators. The author discusses year-round schooling types and lessons learned from Wake County, Chicago, Kentucky, and Virginia. He briefly discusses the “School Improvement Zone” in Miami-Dade Public Schools that added days to the school year and hours to the school day. The author notes that year-round schooling does not seem to positively impact student achievement. However, it has been used effectively to solve for overcrowding.

Afterschool Programs

11. Neild, R. C., Wilson, S. J., & McClanahan, W. (2019). *Afterschool programs: A review of evidence under the Every Student Succeeds Act*. Philadelphia, PA: Research for Action. Retrieved from <https://www.wallacefoundation.org/knowledge-center/Documents/Afterschool-Programs-A-Review-of-Evidence-Under-the-Every-Student-Succeeds-Act.pdf>

Level of Evidence: ESSA Level 4

Overview

Neild, Wilson, and McClanahan (2019) summarize evidence on the effectiveness of specific afterschool programs, based on a comprehensive literature search and review of studies published since 2000. The authors found over 60 afterschool programs associated with positive impacts on students across all grade levels and subject areas, though reading/English Language Arts and mathematics were most common. The report focuses on ESSA’s framework for evidence to evaluate effectiveness. The authors recommend afterschool providers (a) think of evidence as a tool to guide decision-making, (b) check the rigor of evidence available for programs, and (c) recognize the role context plays in achieving outcomes. The report also recommends states using more liberal standards of evidence, such as ESSA Tiers 3 and 4, for selecting afterschool programs until there are more programs meeting standards of Tiers 1 and 2. The primary audience for this review is afterschool program providers, policymakers at state and local education agencies, and others who make decisions about whether to provide funding for afterschool programs and which programs to offer.

Conclusion

Extended learning programs may hold potential for helping students make up for the lost time from COVID-19. Kidron and Lindsay (2014) provided the most comprehensive review of extended learning programs reporting some positive results in very specific contexts. Summer learning programs present an opportunity to negate or reverse out-of-school learning loss. The evidence for year-round education was less compelling with many examples provided with no or negative impacts. The comprehensive review of afterschool programs by Neild, Wilson, and McClanahan (2019) found 60 programs associated with positive student impacts. Every extended learning opportunity provides at least some examples of positive impacts for students that state and local administrators could consider relative to their contexts. The two primary synthesized findings are that extended learning programs can be successful if targeted and taught by quality teachers and that year-round schooling may not be an effective solution to overcoming out-of-school learning loss. Additionally, a consideration cited in most of the provided literature was context. Administrators need to ensure their specific context matches well with the extended learning program of their choice. The 11 references provided in this information request should help state and local administrators consider an extended learning program to close the COVID-19 achievement gap.

Overview of Findings:

- Extended learning programs that are targeted and taught by quality teachers can positively impact student achievement.
- Caution should be taken when considering year-round schooling due to mixed results in the literature.

References

Lee, L., Hughes, J., Smith, K., & Foorman, B. (2016). *An LEA or school guide for identifying evidence-based interventions for school improvement*. Tallahassee, FL: Florida State University, Florida Center for Reading Research. Retrieved from https://fcrr.org/documents/essa/essa_guide_lea_introduction.pdf

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