APRIL 6
2021

Research-informed policy guidance for implementation of the

SUMMER LITERACY COMPONENTS of HB 4048 for grades K to 3

For State, District, PSA, and School Administrators and Educators in Michigan

Dr. Nell K. Duke,
Professor in Literacy, Language, and Culture and in the Combined Program in Education and Psychology at the University of Michigan

Naomi Norman,
Interim Superintendent of the Washtenaw ISD

Sydney Janecke,
University of Michigan Policy Intern with Dr. Nell K. Duke

The purpose of this document is to provide, quickly, some research-informed policy guidance regarding the implementation of the summer literacy components of HB 4048 for children in kindergarten through third grade. We address the summer programs and innovative summer programs portions of the bill.

Most school-based summer programs do not actually improve student achievement.[1] Programs may be well intended, and school personnel may feel like the program is working, and yet when pre- and post-test achievement data are collected, analyzed, and compared to what would have happened in the absence of the program, the programs do not actually raise student achievement. For this reason, in designing programs, **it is very important that we stay as close as possible to features that research suggests have the greatest chance of raising achievement.** For general information about effective summer school programs, Augustine et al. 2016[2] is a good place to start. This document will focus specifically on summer literacy programs and specifically for K to 3.

STRUCTURAL FEATURES OF SCHOOL-BASED SUMMER LITERACY PROGRAMS

Research has found[3] that summer literacy programs with the following characteristics tend to get larger effects:

- **fewer than 13 students per class**
- **4 to 8 hours of instruction per day**
- **70 to 175 hours of total instruction**

It should be noted that few programs this resource intensive have been studied, so these conclusions are based on a small number of studies.

Attendance appears to strongly impact whether or not a program is effective at raising student achievement. It is critical to design programs with a strong view to how to enhance attendance (e.g., partnering with families and community organizations to **set attendance goals and plan ways to meet them,** addressing transportation needs, creating an environment that leads students to *want* to be there).

Summer literacy programs have also been found to be more effective when they reported using **research-based instruction**. We turn to research-based instruction in the next section.

INSTRUCTIONAL FEATURES OF SCHOOL-BASED SUMMER LITERACY PROGRAMS

This section identifies four design principles for K to 3 school-based summer literacy programs. It is by no means an exhaustive account.

1. **Make sure the daily schedule foregrounds opportunities to provide small-group instruction.**

   Small-group instruction tends to be more effective than whole-group instruction, particularly to promote **literacy equity.** Therefore, we recommend setting up the day so that teachers are spending considerable time with children in small groups. To learn more about effective small-group instruction in literacy, see ***Essential Instructional Practices in Early Literacy: K to 3*** online module #3 available free through **literacyessentials.org.**

2. **Group and tailor instruction to students' observed and assessed strengths and needs.**

   Students vary a great deal in their profiles of literacy strengths and needs, and this variation may be even greater this summer than it typically is. Therefore, **we should not provide all children with the same instruction** or group by categories that have little meaning, such as "reading level" or a general perception of ability. Instead, we recommend using formative assessment and observation to organize students into small groups based on specific strengths and needs and then providing instruction that builds on those strengths and addresses those needs. For example,

   - The teacher may form a group of students who have age/grade-level word-reading achievement but who are having difficulty generating inferences as they read.
     - For this group, the teacher may engage in research-supported instructional practices including building content knowledge and vocabulary and teaching students inference-generating habits[4].
   - The teacher may form another group with students who have strong background knowledge and vocabulary for their age/grade level, but who do not know several letter-sound or spelling patterns that are expected for their age/grade level.
     - For this group, the teacher may engage in research-supported instructional practices including explicit instruction in those orthographic patterns with opportunities to apply developing knowledge of those patterns during reading and writing[5].

   In addition to existing district assessment tools, you may find it helpful to use a multi-faceted formative assessment tool such as this, which can be used in virtual or face-to-face contexts: **https://www.nellkduke.org/listening-to-reading-protocol**. Regardless of the assessment tools used, we recommend being deliberate in taking an **asset orientation** toward children.

3. **Ensure that students' experiences when not with the teacher are also research-aligned.**

   For example, there is no evidence that worksheets improve student achievement, so students should not be completing worksheets when not with the teacher. In contrast, there is considerable evidence that certain models of partner reading (e.g., dyad reading, which is explained in the **literacyessentials.org** module cited earlier) improve student achievement, so once children can read conventionally, that should be a priority for student time when not with the teacher. We recommend being deliberate in identifying experiences that are not only educative but also likely to be **motivating and engaging** for children. To learn more about promoting literacy motivation and engagement, see the ***Essential Instructional Practices in Early Literacy: K to 3*** online module #1 available free through **literacyessentials.org.**

4. **Consider including coordinated volunteer or paraprofessional tutoring**.

   Research finds positive effects of many high-dosage tutoring programs during the school year[6]. Unfortunately, tutoring during summer programs has been found to be only about half as effective[7]. This suggests that it will be important to carefully coordinate the tutoring with the summer program. For example, tutors might engage students in reading books that require letter-sound relationships that have been taught to that point in the summer programs, or tutors might coach students as they write texts in a genre being taught during the summer program. **Any use of tutoring should involve training for the tutors in research-supported practices, a clear structure for tutors to follow, and ongoing coaching of the tutors.**

EXAMPLES OF K TO 3 SCHOOL-BASED SUMMER LITERACY PROGRAMS STUDIED SINCE 2013 THAT HAVE BEEN SHOWN TO BE EFFECTIVE IN RESEARCH

The paper cited in footnote 3 (Kim & Quinn, 2013) identifies many effective school-based summer literacy programs. In this section, we identify some programs that have been researched since 2013 and shown to be effective.

PROGRAM ONE:[8]

- For "moderately at risk" rising first and second graders ["Rising" refers to the grade they are entering. For example, a "rising first grader" is a child who has completed kindergarten and will be beginning first grade in the fall.]
- Ran over a 5 week period, 3.5h/day with a minimum of 2 hours of teacher-directed daily literacy instruction, 4 mornings per week
- Literacy skills are modeled and practiced in small group (3-5 students) with corrective feedback
- Instructional emphasis on phonemic awareness and alphabetic understanding

PROGRAM TWO:[9]

- For rising second and third graders who read below grade level
- Ran over 23 days across, 2 hrs per day for a total of 42 hours (days 1 and 23 were for testing and were not counted)
- Children grouped into dyads based on initial mastery of component skills (e.g., letter-sound knowledge, word reading) and regrouped as needed during the first 3 days
- Half of students received instruction in the first hour and the other half received active reading first, then switched for the last hour
- Instructional emphasis on word reading, spelling, and reading fluency supplemented with authentic spelling practice via sentence writing, and active reading

PROGRAM THREE:[10]

- For children ages 6-9 with reading disabilities or reading difficulties
- Ran for 6 weeks, 4 hours a day for 5 days a week (total of 100-120 hours of instruction)
- Children grouped into small groups of 3-5 based on reading level [we recommend an alternative approach]
- Sessions consisted of curricular activities with short breaks of 5-10 min/hour
- Instructional emphasis on teaching phonological and orthographic awareness, word recognition, and comprehension (the Lindamood-Bell Seeing Stars Program)

PROGRAM FOUR:[11]

- For rising second-grade students
- Ran for 5 weeks, 3.5 hours per day, 4 days a week
- Each day consisted of whole group instruction, 45 minutes of intensive direct interaction in small groups, a 15-minute recess, and then a second 45-minute period of small group direct instruction
- Instruction practices emphasized included teacher skill modeling, frequent opportunities for student practice, and individually tailored instruction/feedback
- Instructional emphasis on phonemic awareness, alphabetic principle, fluency, and comprehension

PROGRAM FIVE:[12]

- For rising second- and third-grade students
- Ran for 15 days, 4 or 5 times per week in 30 minute sessions with 2 sessions a day
- Students were paired for instruction based on initial skill level and adjustments in pairs were made for the first week to accommodate rates of response to instruction and behavioral needs
- Instructional emphasis on reading and spelling sounds (3 minutes), word reading and spelling (3-4 minutes), high frequency word reading and spelling (3-4 minutes), sentence reading (2-3 minutes), and book reading (7-10 minutes)

"INNOVATIVE" SCHOOL-BASED SUMMER LITERACY PROGRAMS

The legislation provides additional funding for certain types of programs that the legislation designates as "innovative" and lists 12 categories of such programs. At least with respect to impacts on literacy in K to 3 children during the summer months, few of these program types have been tested in research. However, below are four promising models, two face-to-face and two virtual, that fall into one or more of the categories in the legislation:

FACE-TO-FACE

The Zoo Guide Project: A Summer Literacy Learning Initiative

"Project-based Learning" and "Community-based Projects" categories

In Lansing, Michigan, rising kindergarten, first-, and second-grade boys of color participated in 20 sessions over five weeks, 3.5 hours per session, 3 hours of which were instruction. Time was used quite intentionally, for example even snack times involved opportunities for relationship building and oral language development. Throughout the program, children focused on creating guides to zoo animals to be displayed at the city zoo for use by children their age. Central principles of the curriculum, quoting from Dr. Kate Roberts of Wayne State University, lead curriculum developer, were:

- Link everything to a real reason for doing it
- Keep students in their Zone of Proximal Development
- Value what kids bring to the table and show them how to make it work for them
- Involve everyone
- Keep things positive

The Frank Porter Graham Institute at the University of North Carolina supported the program and research on it. Measures administered before and after the program (specifically, at the end and beginning of the school year) found statistically significant positive impacts on letter-word identification, word attack, passage comprehension (all on Woodcock-Johnson III), informational text comprehension (on the Informational Strategic Cloze Assessment), and the Elementary Writing Attitudes Survey. For information about this curriculum or other project-based learning curricular resources, contact Dr. Kate Roberts (**eo9096@wayne.edu**).

VIRTUAL

Literacy Learning Labs: A Summer Literacy Learning Initiative

"Public and Private Partnerships" and "Community-based Projects" categories

In Pontiac, Michigan, rising first- and second-grade children participated in a summer program over five weeks. Children and their families met with a teacher for small-group instruction via videoconferencing once per week for 45-60 minutes. In addition, once a week children videoconferenced one-on-one with a teacher and spoke by phone with a teacher for a total of approximately 30 minutes of one-on-one time with a teacher. Teachers collaborated with family members to plan activities and student support. Outside of their time with the teacher, children and their families worked with "choice boards" with a variety of thematically linked activities, some required, some choices.

The program partners included Oakland Schools, the Pontiac City Library, the Pontiac Creative Art Center, the Pontiac United Education Coalition, the Oakland Literacy Council, Sprouts Fresh Market, Kensington, Church, Marlene Malkin, and Oakland University. Per program lead developers Dr. Ashelin R. Currie and Felicia Geeter, the Literacy Learning Lab was designed to:

- Build family/school relationships (and provide professional development for teachers in this area)
- Increase family engagement by providing hands-on academic and instructional support
- Put books in students' hands by establishing at-home reading libraries for students
- Decrease the potential impact of school closing due to COVID-19
- Establish community partnerships

Measures administered at the beginning and end of the program found that 72% of children showed growth in an oral listening comprehension assessment. It measured unprompted retelling, prompted retelling, inference, critical thinking, and connections. Eighty percent showed growth of at least one reading level on Reading A-Z oral reading assessment. For information about this curriculum, contact Dr. Ashelin R. Currie (**Ashelin.Currie@oakland.k12.mi.us**) or Felicia Geeter (**felicia.geeter@pontiacschools.org**).

FACE-TO-FACE

Summer Readers-Future Leaders Summer Program

"Community-based Projects" with STEM, outdoor, physical, social emotional learning components

Based in San Diego, CA, rising second- and third-graders participated in a summer program that involved differentiated literacy instruction in word recognition, fluency, vocabulary, academic language, comprehension strategies, and motivation. Children also engaged in arts activities linked to literacy and in outdoor science activities. Children also visited a local public library five times over the course of the program and engaged in activities aimed at physical and character development. There were also family engagement opportunities.

There was a significant teacher professional development aspect of the program, with professional development for program teachers provided by the California Reading and Literature Project. Other project partners included Chollas-Mead Elementary School, the San Diego Unified School District, Young Audiences of San Diego, the San Diego Science Project, Groundwork San Diego, the Jackie Robinson Family YMCA, the Valencia Park/Malcolm X Library, READ/San Diego, UPforEd, the Jacobs Family Foundation, the Parker Foundation, and the Jacobs Center for Neighborhood Innovation. The convener was the Diamond Educational Excellence Partnership (DEEP).

Measures administered before and after the program documented that between 93% and 97% of students maintained or increased their recognition of letters, phonics patterns, and irregular words; between 70% and 79% of students maintained or improved reading fluency, vocabulary skills, and comprehension; between 67% and 63% of students maintained or improved their motivation to read academic material and recreational material, respectively; and between 98% and 99% of students maintained or improved their ability to use academic language, develop scientific explanations, and produce expository writing. There were also results reported for science conceptual knowledge, environmental stewardship, character, and other constructs. For more information about the program, see **https://www.jacobscenter.org/_pdf/DEEP_SRFL-FinalReport.pdf**.

VIRTUAL

Virtual Freedom Schools Summer Literacy Academy

"Summer programs that combine physical activity and social-emotional learning" category

Based in Philadelphia, PA, but available to children throughout the country, rising first-, second-, and third-grade Black children participated in a summer program over four weeks for a total of 35 hours of instruction. Children started each day with Harambee, a joyful coming together that involves song, movement, and recognition of one another. The program provided small-group instruction in phonics and reading a series of books designed to promote application of the phonics elements taught. The program also provided read-alouds of culturally affirming children's trade books with attention to reading comprehension and vocabulary-building. In addition, children engaged in mindfulness exercises and movement breaks.

The Center for Black Educator Development led this program with goals for the participating children—to make gains in early literacy and reinforce positive racial identity—as well as for the educators in the program (called *servant leaders*). They aimed to build teaching skills and professional confidence and to encourage careers in teaching.

Measures administered at the beginning and end of the program found that children made statistically significant gains in targeted vocabulary, reading comprehension, word-reading, reading fluency, and their attitudes toward themselves, their communities, and their racial identities. For more information about the program, see: **https://www.thecenterblacked.org/new-blog/fsla-impactreport-2020.**

Other Innovation Categories

There are other innovation categories in the legislation that have research support with respect to literacy development in studies with K to 3 children during the school year. Perhaps most notably, there is research to support **developing science and literacy together**[13] and research to support engaging children in second grade and above in **readers' theater**[14] to support literacy development.

Footnotes

1 For a brief but compelling article related to this statement, see: Barshay, J. (2021, March 29). Proof points: Slim research evidence for summer school. *Hechinger Report.*

2 Augustine, C. H., McCombs, J. S., Pane, J. F., Schwartz, H. L., Schweig, J., McEachin, A., & Siler-Evans, K. (2016). *Learning from summer: Effects of voluntary summer learning programs on low-income urban youth*. Santa Monica, CA: RAND Corporation. https://www.rand.org/pubs/research_reports/RR1557.html.

3 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.

4 For a meta-analysis (quantitative study of studies) showing that inference instruction is often effective, see: Elleman, A.M. (2017). Examining the impact of inference instruction on the literal and inferential comprehension of skilled and less skilled readers: A meta-analytic review. *Journal of Educational Psychology, 109*(6), 761–781. https://doi.org/10.1037/edu00 00180 (A pre-publication version is available free at https://psycnet.apa.org/manuscript/2017-06326-001.pdf)

5 An example of a study showing the effectiveness of this instructional practice is: Connelly, V., Johnston, R., & Thompson, G.B. (2001). The effect of phonics instruction on the reading comprehension of beginning readers. *Reading and Writing*, *14*(5/6), 423–457. doi:10.1023/A:1011114724881

6 A meta-analysis showing effects of tutoring: Nickow, A. J., Oreopoulos, P., & Quan, V. (2020). The impressive effects of tutoring on preK-12 learning: A systematic review and meta-analysis of the experimental evidence. (EdWorkingPaper: 20-267). Retrieved from Annenberg Institute at Brown University: https://doi.org/10.26300/eh0c-pc52

7 For more information on design principles for effective tutoring: Robinson, C. D., Kraft, M. A., Loeb, S., & Schueler, B. E. (2021). Accelerating student learning with high-dosage tutoring. *EdResearch for Recovery Design Principle Series.*

8 Zvoch, K., & Stevens, J. J. (2013). Summer school effects in a randomized field trial. *Early Childhood Research Quarterly, 28*(1), 24-32. https://doi.org/10.1016/j.ecresq.2012.05.002.

9 Beach, K. D., & Traga Philippakos, Z. A. (2021). Effects of a summer reading intervention on the reading performance of elementary grade students from low-income families. *Reading & Writing Quarterly, 37*(2), 169-189. http://doi.org/10.1080/10573569.2020.1760154

10 Christodoulou, J. A., Cyr, A., Murtagh, J., Chang, P., Lin, J., Guarino, A. J., Hook, P., & Gabrieli, J. D. E. (2017). Impact of intensive summer reading intervention for children with reading disabilities and difficulties in early elementary school. *Journal of Learning Disabilities, 50*(2), 115–127. https://doi.org/10.1177/0022219415617163

11 Zvoch, K., & Stevens, J., (2015). Identification of summer school effects by comparing the in- and out-of-school growth rates of struggling early readers. *The Elementary School Journal, 115*(3). 115(3), 433 - 456. https://doi.org/10.1086/680229

12 Beach, K. D., McIntyre, E., Philippakos, Z. A., Mraz, M., Pilonieta, P., & Vintinner, J. P. (2018). Effects of a summer reading intervention on reading skills for low-income Black and Hispanic students in elementary school. *Reading & Writing Quarterly, 34*(3), 263-280, https://doi.org/10.1080/10573569.2018.1446859

13 For example, Cervetti, G. N., Barber, J., Dorph, R., Pearson, P. D., & Goldschmidt, P. G. (2012), The impact of an integrated approach to science and literacy in elementary school classrooms. *Journal of Research on Science Teaching, 49*, 631-658. https://doi.org/10.1002/tea.21015

14 Young, C., Durham, P., Miller, M., Rasinski, T. V., & Lane, F. (2019). Improving reading comprehension with readers theater, *The Journal of Educational Research*, 112(5), 615-626. http://doi.org/10.1080/00220671.2019.1649240