



Memorandum

To: Molly Loomis, Facilitator, Vermont PreK Education Implementation Committee

From: Lori Connors-Tadros, Senior Research Fellow, NIEER, and GG Weisenfeld, Senior ECE Policy Specialist, NIEER

Date: March 12, 2024

Re: Resources to support the VT PreK Education Implementation Committee

Technical Assistance Request: Molly Loomis is providing support to the VT PreK Education Implementation Committee. She has asked for resources and examples on the following:

1. What does current research say about benchmarks and best practices for high-quality PreK?
2. Who has implemented these well?
3. Where might Vermont build on our existing quality systems and where do we need to improve?

1. *What does current research say about best practices for high-quality pre-K?*

Over the past few decades, a growing body of research suggests that participating in high-quality early learning experiences can enhance children’s development, reduce achievement gaps at kindergarten entry, and even have long-term benefits in school and beyond.^[1] However, these benefits can *only* occur if a child’s classroom experience is high-quality.

Elements associated with better child outcomes present in high-quality pre-K programs include the use and support of comprehensive early learning standards; credentialed teachers; ongoing assistant and lead teacher training and support; appropriate class size and teacher-student ratio; and a system of continuous quality improvement.

Annually, the NIEER State of Preschool Yearbook analyzes state-funded preschool programs’ policies on a set of 10 benchmarks^[2] that are consistent with what research suggests as minimums for highly effective programs.^[3]

- Four of the 10 NIEER benchmarks involve teacher credentials and training. To meet these teacher standards, programs must require lead teachers to have at least a **bachelor’s degree; specialization in preschool education**; assistant teachers must be required to have at least a **Child Development Associate (CDA)** or equivalent credential based on coursework; and teachers and assistant teachers are required to have at least 15 hours of **annual in-service training**, participate in coaching, and have individualized professional development plans.
- Two of the benchmarks specify that **class sizes** must be limited to 20 children and have a **teacher-to-child ratio** of no more than 1 staff member to 10 children.

- The last four benchmarks:
 - specify that the state’s **Early Learning Standards** must be comprehensive, covering the five areas identified by the National Education Goals Panel, must be comprehensive, covering the five areas identified by the National Education Goals Panel, aligned with required child assessments, and be supported to implement;
 - evidence of **curriculum support** includes both guidance or approval for selecting one as well as training or ongoing technical support to implement;
 - programs must also require vision, hearing, health and developmental **child screenings** and referrals; and
 - the last benchmark requires programs implement a **system of continued quality improvement**, which includes regular onsite visits to measure classroom quality and the required use of data collected through these structured observations.

In addition, to the 10 NIEER benchmarks, research has found that:

- Extended-day, extended-year preschool programs have a greater impact than those that attend half-day programs (these tend to happen in nonpublic school settings),^[4]
- Better child outcomes are associated with two years of preschool compared to only one at kindergarten entry,^[5]
- Universal preschool programs are likely to produce benefits that far exceed the additional cost,^[6] and
- A mixed delivery system can increase family choice to select the type of environment they prefer for their children.^[7]

2. *What states have implemented high-quality pre-K?*

In 2021-2022, Alabama, Hawaii, Michigan, Mississippi, and Rhode Island remain the only five states to meet all 10 of NIEER’s benchmarks.^[8]

In terms of other policies for the 2021-2022 school year:^[9]

- Six states can be said to have implemented universal preschool: Florida, Iowa, Oklahoma, Vermont, West Virginia, Wisconsin, and DC. DC is the only one to provide universal preschool at age three as well as age four.
- Out of the 62 pre-K programs, the required minimum hours of operation were part-day option (26 programs; 42%); school-day (14 programs, 23%); extended-day (6 programs, 10%); and determined locally (16 programs).
- Most states operate pre-K in a mixed-delivery setting. During 2021-2022, 89% of state-funded pre-K programs utilized a mixed delivery system.

3. *Where might Vermont build on its existing quality systems and areas for improvement?*

Access: In the 2022 State of Preschool Yearbook, Vermont ranked 4th for access to 4-year-olds and 2nd for access to 3-year-olds. However, only 35% of 3-year-olds were served in pre-K in 2021-2022. Vermont only offers a part-day pre-K program (10 hours) per week. Some sites (public schools, nonpublic preschools, family child care homes, etc.) may offer additional hours, but they are paid for with other funding sources.

Quality: Vermont meets 7 out of 10 of NIEER’s quality Benchmarks, see Figure 1.

It is important that if any state pre-K policies change, this may jeopardize the program continuing to meet those 7 benchmarks. For example, in July 2023, the Quality Recognition and Improvement System

was revised. The 2023-2024 school year was a pilot year to help programs become familiar with the new system. The new system will be reviewed for upcoming Yearbooks to ensure that the criteria outlined in the continuous quality benchmark are still met by the pre-K program.

The three benchmarks not met include:

- **Lead Teacher B.A.** To meet this benchmark, Vermont would need to require all lead teachers to have a B.A. degree. Currently, all licensed pre-K teachers in public school settings are required to have a BA. and a Vermont Early Educator license. In nonpublic settings, at least one teacher who holds a B.A./M.A. and a valid Vermont educator license with an endorsement in either Early Childhood Educator or Early Childhood Special Education must be on-site and physically present to oversee and ensure that curriculum is aligned with the Vermont Early Learning Standards and pre-K instruction is provided by the classroom teacher during designated pre-K hours. To meet this benchmark, the teacher with the B.A. degree must not only be on site but be in each pre-K classroom.
- **Assistant Teacher Degree:** Vermont's pre-K program has both teacher associates and teacher assistants, both of whom are required to have a high school diploma or GED and preservice training in early childhood development or education and complete 15 hours of in-service training annually. To meet the assistant degree benchmark, assistants would need to have a Child Development Associate (CDA) credential or equivalent. The state offers CDA training through the Lights Professional Development out of the Community College of Vermont.
- **Staff Professional Development:** To meet this benchmark, the pre-K program would need to require all teachers in nonpublic schools to participate in coaching. Vermont has a professional development system (Lights Professional Development) that is available but not required to be used by all teachers, only those that are identified in need of coaching.

Figure 1. Vermont’s 2022 State of Preschool Benchmark Summary

QUALITY STANDARDS CHECKLIST			REQUIREMENT MEETS BENCHMARK?
POLICY	VT PRE-K REQUIREMENT	BENCHMARK	
Early learning & development standards	Comprehensive, aligned, supported, culturally sensitive	Comprehensive, aligned, supported, culturally sensitive	<input checked="" type="checkbox"/>
Curriculum supports	Approval process & supports	Approval process & supports	<input checked="" type="checkbox"/>
Teacher degree	BA (public); BA for lead teacher, AA for classroom teacher (nonpublic)	BA	<input type="checkbox"/>
Teacher specialized training	ECE, CD, Elem. Ed. with ECE, ECE SpEd (public); ECE, CD, ECE SpEd (nonpublic)	Specializing in pre-K	<input checked="" type="checkbox"/>
Assistant teacher degree	HSD	CDA or equivalent	<input type="checkbox"/>
Staff professional development	6 credit hours/5 years (teachers); 15 hours/year (assistants); PD plans; Coaching (public & some nonpublic)	For teachers & assistants: At least 15 hours/year; individual PD plans; coaching	<input type="checkbox"/>
Maximum class size	20 (3- & 4-year-olds)	20 or lower	<input checked="" type="checkbox"/>
Staff-child ratio	1:10 (3- & 4-year-olds)	1:10 or better	<input checked="" type="checkbox"/>
Screening & referral	Vision, hearing, health & more	Vision, hearing & health screenings; & referral	<input checked="" type="checkbox"/>
Continuous quality improvement system	Structured classroom observations; Data used for program improvement	Structured classroom observations; data used for program improvement	<input checked="" type="checkbox"/>

For more information about the benchmarks, see the Executive Summary and Roadmap to State Profile Pages.

* Indicates that while policy meets the benchmark, it is not being implemented fully.

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Source: Friedman-Krauss, A. H., Barnett, W. S., Hodges, K. S., Garver, K. A., Weisenfeld, G., Gardiner, B. A., Jost, T. M. (2023). *The State of Preschool 2022: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research, p. 148.

¹¹ For example, see Barnett, W. S., & Jung, K. (2021). Effects of New Jersey’s Abbott preschool program on children’s achievement, grade retention, and special education through tenth grade. *Early Childhood Research Quarterly*, 56: 248–259; Chaudry, A., Morrissey, T., Weiland, C., & Yoshikawa, H. (2021). *Cradle to kindergarten: A new path to combat inequity*, 2nd Ed. Russell Sage Foundation; Barnett, W.S. (2008). *Preschool education and its lasting effects: Research and policy implications*. Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. https://nepc.colorado.edu/sites/default/files/PB-Barnett-EARLY-ED_FINAL.pdf.; McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, K. M., Yang, R., Koepp, A., & Shonkoff, J. P. (2017). Impacts of early childhood education on medium-and long-term educational outcomes. *Educational Researcher*, 46(8), 474-487; Phillips, D. A., Lipsey, M. W., Dodge, K. A., Haskins, R., Bassok, D., Burchinal, M. R., Duncan, G. J., Dynarski, M., Magnuson, K. A., & Weiland, C. (2017). *Puzzling it out: The current state of scientific knowledge on pre-kindergarten effects, a consensus statement*. Brookings Institution; Reynolds, A. J., Ou, S. R., Mondri, C. F., & Giovanelli, A. (2019). Reducing poverty and inequality through preschool-to-third-grade prevention services. *American Psychologist*, 74(6), 653; Ruhm, C., & Waldfogel, J. (2012). Long-term effects of early childhood care

and education. *Nordic Economic Policy Review*, 1(1), 23-51; Reynolds, A.J., Ou, S.R. Generative Mechanisms in Early Childhood Interventions: A Confirmatory Research Framework for Prevention. *Prev Sci* 17, 794–805 (2016). <https://doi.org/10.1007/s11121-015-0611-6>; Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W. T., Ludwig, J., Magnuson, K. A., Phillips, S., & Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education*. Society for Research in Child Development; Gormley Jr, W. T., Phillips, D., & Anderson, S. (2018). The effects of Tulsa’s Pre-K program on middle school student performance. *Journal of Policy Analysis and Management*, 37: 63-87.

^[2] For more information about the benchmarks and their research base, see: Friedman-Krauss, A. H., Barnett, W. S., Hodges, K. S., Garver, K. A., Weisenfeld, G., Gardiner, B. A., Jost, T. M. (2023). *The State of Preschool 2022: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

^[3] Friedman-Krauss, A. H., Barnett, W. S., Hodges, K. S., Garver, K. A., Weisenfeld, G., Gardiner, B. A., Jost, T. M. (2023). *The State of Preschool 2022: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

^[4] Robin, K., Frede, E., & Barnett, W. S. (2006). *Is more better? The effects of full-day vs half-day preschool early school achievement*. National Institute for Early Education Research.

^[5] Arteaga, I., Humpage, S., Reynolds, A. J., & Temple, J. A. (2014, May 1). One year of preschool or two - Is it important for adult outcomes? Results from the Chicago longitudinal study of the child-parent centers. *Econ Educ Review*, 40:221-237.

^[6] Barnett, W.S. (2010). Universal and targeted approaches to preschool education in the United States. *International Journal of Child Care and Education Policy*,4: 1–12.

^[7] Garver, K., Weisenfeld, G. G., Connors-Tadros, L., Hodges, K., Melnick, H., & Plasencia, S. (2023). *State preschool in a mixed delivery system: Lessons from five states*. Learning Policy Institute; Weisenfeld, G. G., & Frede, E. (2021). *Including family child care in state and city-funded pre-k systems: Opportunities and challenges*. National Institute for Early Education Research; Harmeyer, E., Weisenfeld, G., & Frede, E. (2023). *Including family child care (FCC) programs in publicly-funded pre-K: Conditions for success*. National Institute for Early Education Research.

^[8] Friedman-Krauss, A. H., Barnett, W. S., Hodges, K. S., Garver, K. A., Weisenfeld, G., Gardiner, B. A., Jost, T. M. (2023). *The State of Preschool 2022: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

^[9] Findings come from Friedman-Krauss, et. al (2023); Garver, et. al (2023).