#### INTEROFFICE CORRESPONDENCE

Los Angeles Unified School District Independent Analysis Unit

<u>INFORMATIVE</u>

**DATE:** May 19, 2022

TO: Members, Board of Education

Alberto Carvalho, Superintendent

FROM: Glenn Daley, Director, Independent Analysis Unit

Analyst: Tracy Wilkinson Macho, PhD

SUBJECT: Research Spotlight: Implementation of Universal Transitional Kindergarten in Los

Angeles Unified and Review of Existing Research on Transitional and Pre-

Kindergarten

On July 12, 2021, Governor Gavin Newsom signed SB 129, also known as the California Comeback Plan (CCP), into law. Among other initiatives, the CCP achieves universal transitional kindergarten (UTK) in the state of California, "providing high-quality, free transitional kindergarten (TK) to all four-year-olds in California, regardless of income or immigration status." Implementation of the program will begin during the 2022-23 school year with full participation in the state anticipated by the 2025-26 school year.

Though full statewide implementation is not expected until the 2025-26 school year, **L.A. Unified** plans to have UTK fully implemented during the 2023-24 school year, according to Dean Tagawa, Executive Director of the Early Childhood Education Division. For the 2023-24 school year, any child who turns 5 years old by September 1, 2024 will be eligible to enroll in transitional kindergarten in L.A. Unified ahead of their eligibility for Kindergarten in the 2024-25 school year.<sup>2</sup>

Responding to a request from Board members, the Independent Analysis Unit (IAU) began inquiry into the preparedness of L.A. Unified for the full implementation of UTK, looking specifically at issues related to budget, staffing, enrollment, and facilities. We found that Dr. Tagawa and the staff of the Early Childhood Division appear to have planned well for the expansion of the program to all schools with existing TK or Early TK (ETK) programs.<sup>3</sup> With full implementation likely to be successful from an operations point of view, the District can begin to plan for monitoring and evaluation of TK to promote and ensure quality and effectiveness. Toward that end, this memo presents a discussion of prior research on the effects of transitional and pre-kindergarten programs, as well as what is known about best practices.

### UNIVERSAL PRE-KINDERGARTEN IN THE UNITED STATES

The Education Commission of the States (ECS) defines universal pre-Kindergarten (pre-K) as programs that are "not capped by funding amounts, enrollment numbers, or enrollment deadlines." These programs offer pre-K to all 4-year-olds regardless of income. In cities and states that currently have pre-K programs considered to be universal, every child is eligible to, and many children do, enroll in the universal pre-K program. Enrollment in these programs, however, is not mandatory, and some children do not participate.

However, as of 2022, only a small number of states (including Vermont and Florida) offer universal pre-K as defined by ECS. A few cities, including New York City, also offer pre-K for all 4-year-old children. Several other states and cities (specifically, Colorado and Multnomah County, OR) have voted to permit universal pre-K and are in the process of implementing their programs. Other states have pre-K programs that are considered "near universal", with policies that many consider to be universal, but do not offer pre-K programs in all school districts.

#### TRANSITIONAL KINDERGARTEN IN CALIFORNIA

The Kindergarten Readiness Act of 2010 (SB 1381) created TK in its current form in California. Prior to the passage of the bill, any child who turned five before December 2<sup>nd</sup> in a given school year was eligible to register for Kindergarten that school year. After the bill was signed into law, children who were not five by September 2<sup>nd</sup> were no longer eligible to attend Kindergarten that school year but were instead eligible for a new program: TK.<sup>7</sup> TK was "intended to provide extra time and a developmentally appropriate curriculum to prepare for Kindergarten" specifically for those children who turned five in the early part of the school year, but after the cut off of September 2. It has been voluntary in nature and parents are not required to enroll eligible children. L.A. Unified has since opened TK in all schools that had existing Kindergarten programs. The L.A. Unified Early Childhood Division plans to offer UTK at 321 District sites (roughly 70% of planned sites) in the 2022-23 school year, including five new sites, and the remainder of sites to achieve a total of 457 schools when UTK reaches full implementation in the 2023-24 school year.<sup>9</sup>

Assembly Bill 130 (AB 130), along with an allocation in the 2021-22 State Budget, established the first steps toward UTK in California. As previously noted, the law begins the expansion of TK in the 2022-23 school year with the goal of full implementation by the 2025-26 school year, but school districts can implement UTK earlier than the incremental timeline suggested by the State. Students will gradually become eligible for TK based on their birthdates. 10

The expansion of TK comes after serious disruption of early childhood programs due to the COVID-19 pandemic. The National Institute for Early Education Research (NIEER) recently reported that California had one of the largest decreases in state-funded preschool enrollment in the United States last year, with a statewide enrollment of 157,106 during the 2020-21 school year, a 35% decrease from the previous year (242,771 in 2019-20).<sup>11</sup>

### TRANSITIONAL KINDERGARTEN IN L.A. UNIFIED

The TK program in L.A. Unified is currently open 180 days a year, and children attend the program five days a week for six hours per day. The Early Childhood Education Division describes the TK program as having a "whole child approach," meaning that it is not just skill-based with a goal of providing school readiness but strives to also support a child's social-emotional, physical, and cognitive development. The program centers on student choice and input and is play-based with differentiated small groups based on children's abilities and interests. The curriculum for L.A. Unified's TK program is based on the Preschool Learning Foundations for California 1213 and includes an emphasis on concept development and oral language development.

#### PREVIOUS RESEARCH ON TK

Public school offered to children prior to Kindergarten has been the subject of extensive research since at least the 1960s. This research has led to a consensus among educators and policy makers that pre-K can improve school readiness. However, less well-known is research that points to diminishing benefits over time (i.e., "fadeout") and even adverse academic and social effects over several years. It is important for District leaders to be aware of the research to indicate possible risks of beginning academic instruction at an early age.

## 2018 IAU Study on TK

The IAU completed a study of TK and student outcomes through 2<sup>nd</sup> grade in 2018 and found positive outcomes for students who attended TK in L.A. Unified that "endure past the kindergarten year." More specifically, the evaluation found that the students who participated in the District's TK program (compared with those who did not participate in TK):

- Significantly outperformed comparison groups academically in math, writing, and reading in Kindergarten and 1<sup>st</sup> grade classroom grades;
- Significantly outperformed peers in DIBELS in Kindergarten, 1st grade, and 2nd grade;
- Outperformed peers in math and English language arts SBAC scores;
- Had better work effort grades than the comparison group;
- Had higher English language development classroom grades for English language learners who participated in TK than the comparison group;
- Had higher grades in work effort and socioemotional skills on report cards than the comparison group;
- Had better attendance throughout their elementary school years than the comparison group.

# **Research Showing Positive Outcomes of TK/Pre-K**

The IAU study corroborates other studies that have shown positive short and long-term effects for students who participated in pre-K programs. Two of the most well-known of these studies are the Perry Preschool Study and the Abecedarian Project. Both studies showed positive effects of participation in pre-K on later academic performance, as well as on life outcomes after high school.

The Perry Preschool Study had a sample of 123 low-income African American three- and four-yearolds who were determined to be at risk for "school failure" in Ypsilanti, Michigan. The children participated in a program from 1962 to 1967 and then were followed through age 40. Fifty-eight of the children were assigned to a group that participated in a high-quality preschool program, while the remaining 65 children did not participate in any preschool program. With regards to academic outcomes, they found that the students who participated in the program were significantly more likely to graduate from high school than their peers (65% vs. 45%), with females who participated being even more likely to graduate than female non-participants (84% vs. 32%).

With regards to life outcomes, the program participants were more likely to be employed at the ages of 27 and 40 than their peers and had higher median earnings at the same ages. Individuals

who participated in the program also had significantly fewer arrests for crimes through age 40 than the individuals who did not participate in the program. Finally, the authors determined that the program's economic return to society was \$244,812 per participant (in constant 2000 dollars discounted at 3%) on an initial investment of \$15,166 per participant.<sup>15</sup>

The Abecedarian Project, initiated in 1972, recruited 111 children from at-risk families in Orange County, North Carolina and monitored their progress through age 35. Most of the participants were African American and born between the years of 1972 and 1977. Children who were randomly assigned to the intervention group received full-time, high-quality educational intervention from infancy through age 5, which included individualized educational games designed to stimulate social, emotional, and cognitive development with a particular emphasis on language. With regards to academic outcomes, the researchers found that the program participants scored higher on achievement tests in math and reading than their peers during their elementary and secondary school years and had lower levels of grade retention and receipt of special education services. Beyond high school, the program participants were more likely to have attended a four-year college or university at age 21, and more likely to hold a bachelor's degree and a job at age 30. Finally, the study reports that for every dollar spent on the program, taxpayers saved \$2.50 as a result of higher incomes, reduced need for educational and government services, and lower health care costs. <sup>16</sup>

While these studies do show positive effects of early education on academic and nonacademic outcomes, it is important to note that they both involved small samples of a very specific population (mostly low-income African American children) participating in intensive programs in communities that offered very few alternative early education programs. This distinctiveness of these samples raises questions about whether results would be similar in other populations.

# Contradictory Research Regarding the Outcomes of TK/Pre-K

While studies have found positive outcomes resulting from participation in pre-K/TK programs, results from some studies have cast doubts about the effects of these early education programs on the academic outcomes of the students who were enrolled. Most recently, researchers from Vanderbilt University studied the short- and long-term effects of Tennessee's state-supported pre-K program. This study followed 2,990 children from low-income families from two cohorts who applied to pre-K through the Tennessee Voluntary Pre-K (TN-VPK) program and were admitted based on a randomized admission decision process. The program is managed directly by traditional public school districts.

Results from the longitudinal study, which has followed the two cohorts through sixth grade so far, show that the students who were randomly assigned to the pre-K program had lower achievement test scores on state tests in third through sixth grades when compared to students who applied, but were not admitted to the program. The participating students showed stronger negative effects on academic outcomes as they progressed in school, with the strongest negative effects shown in sixth grade, compared to the non-participants. Additionally, there were comparatively negative effects for students who participated in the pre-K program in terms of nonacademic outcomes, including higher rates of disciplinary infractions, lower attendance rates, and higher likelihood of receiving special education services.<sup>17</sup>

The authors of the TN-VPK study acknowledge certain limitations of their research, including the fact that this particular program could be quite different from programs implemented in other states, thus limiting the ability to generalize results to programs in other cities and states. However, they note that previous studies have found the program to be "top tier" compared to similar programs in other states<sup>18</sup> and that thus far, they have not been able to identify specific characteristics of the TN-VPK program that would explain the negative effects shown.<sup>19</sup>

Another study evaluated Georgia's pre-K program, which has been classified as "mostly universal" by ECS. <sup>20</sup> Georgia's program is state-funded and facilitated through the state's public schools, licensed private centers, and Head Start center partners, and operates for 6.5 hours a day, 180 days per year. At the time of the report's release, only longitudinal outcome data through the 3<sup>rd</sup> grade was available, but researchers intend to follow students from the program through 5<sup>th</sup> grade.

Comparing the students who participated in the program with demographically similar students who did not participate, researchers found that the pre-K participants "displayed a pattern of growth on most [language, literacy, and math] measures during pre-K and Kindergarten that was not sustained through second grade." Additionally, students who were dual language learners showed "similar patterns of early growth for skills in English, but showed decreases over time for most language and literacy skills in Spanish." The researchers also found that certain characteristics predicted differences in growth on the skills measured, including language proficiency, racial/ethnic background, pre-K provider type (public vs. private), and classroom quality. In the most recent report from this longitudinal study, which adds results from the participants' 3rd grade year, researchers found that "at the end of third grade, children's scores, on average were below the national norm on...Vocabulary and Passage Comprehension." The authors note that this pattern of initial strong effects related to pre-K participation "that are not sustained over time" are consistent with results from many other studies on long-term outcomes of participation in pre-K programs. 2324

## **SYNTHESIS**

The combination of negative and positive results from these prior studies heightens the importance of monitoring and evaluating L.A. Unified's TK program. Though they offer some guidance, these studies concerned programs that differ from what the District offers and serve different populations of students from those of Los Angeles; the studies also had some serious methodological limitations.

The Perry Preschool Study and Abecedarian Project were randomized controlled trials (RCTs) and showed positive long-term effects in both academic and life outcomes. They also both followed their subjects through adulthood. However, these two classic studies were small, quite old (1960s and 1970s), have never been replicated and had some significant deviance from strict RCT protocol. They also concerned interventions that were not directly comparable to the District's TK program.

The TN-VPK and GA studies were not RCTs, though they approximated the same quality using a different method. They were also much shorter term than the Perry Preschool Study and Abecedarian Project: the participants from the TN-VPK and GA studies have only been followed

through elementary school so far. Thus, we do not know how the outcomes from the TN-VPK and GA studies will change in the longer-term. Next, we do not have comprehensive information about the alternative care and education arrangements for the children in the control group in the TN-VPK study, so we do not know anything about the quality of the alternative care that they received. Additionally, the TN-VPK and GA studies involved demographically different populations of students from the population we anticipate serving through UTK in L.A. Unified. Finally, the state preschools in Tennessee and Georgia may differ in important ways from the program we anticipate will be implemented in the District; they may focus more on constrained skills and school readiness, and less on the whole child compared to L.A. Unified's program. As a result, it is difficult to make comparisons between these programs and the prospective UTK program at L.A. Unified.

Nevertheless, research showing fadeout and adverse effects of TK is concerning and should be taken seriously by any state or district considering implementation of a universal program. Though there is no strong evidence to recommend against implementation of UTK in L.A. Unified, we do recommend close monitoring of the program and students participating in it both short-term and long-term to determine whether detrimental effects of UTK exist, as well as the causes of any effects, both positive and negative.

# **BEST PRACTICES AND RECOMMENDATIONS**

Prior research has shown conflicting results regarding the effects of pre-K and TK programs. While much research exists about the short- and long-term effects of pre-K and TK, no research about the effects of a UTK program is directly comparable to what will be implemented here in California and at L.A. Unified. The curriculum and program goals of the TN-VPK program are very different from the TK program at L.A. Unified in that it is focused on early literacy and numeracy, and there is no intent to change the TK program in the District to be more like the state-supported program in Tennessee.

Though some of the specific characteristics that lead to adverse effects are still unknown, there are certain practices and standards that are proven to be critical "first steps" in establishing high-quality universal programs. The National Institute for Early Education Research (NIEER) has used their extensive research in early education to establish a list of 10 standards for pre-K programs. They emphasize that these are minimum competencies, not just recommendations or measures of excellence. As such, fulfilling these minimum competencies does not guarantee a successful UTK program. These should be monitored as L.A. Unified plans for and transitions to UTK. Table 1 shows a comparison of the NIEER standards with L.A. Unified's plans for UTK implementation.

To ensure that the new UTK program in L.A. Unified is effective and to decrease the chances of adverse effects on program participants, continuous and thorough monitoring and evaluation of the program will be necessary. As noted previously, we do not currently have any way of knowing whether L.A. Unified's planned UTK program is one that will result in positive long-term benefits for participating students. Therefore, monitoring is important. Given the decrease in early childhood enrollment in the state, we also recommend monitoring TK enrollment to learn more about the effects of the new UTK policy on participation in UTK.

Table 1. NIEER Standards for Pre-K Programs and L.A. Unified Plans for UTK Implementation

Minimum Competency	L.A. Unified Plans
Comprehensive early learning standards at the state or jurisdictional level	Updates to the California Preschool Learning Foundations are in development at the state level. <sup>28</sup>
A bachelor's degree for lead pre-K teachers	TK teachers must have a teaching credential (per CA law)
Specialized early childhood training for lead pre- K teachers	TK teachers are required to have 24 units of ECE training (per CA law)
Child development credential for assistant pre-K teachers	TK teachers must have a Child Development Permit (per CA law)
Participation by teachers in a substantial number of hours of professional development (at least 15 hours per year)	Before the start of the school year, LA Unified strongly recommends that teachers take 5 asynchronous core courses for a total of 17.5 hours of professional development. When the core courses have been completed, an additional 5 courses for 7.5 hours of professional development are recommended. <sup>29</sup>
Maximum class size of 20 or fewer	L.A. Unified will implement by the 2023-24 school year. Current max class size is 24.
Staff-to-child ratio of 1:10 or less	Will implement by the 2023-24 school year. Current staff-to-child ratio is 1:12.
Children receive screening, referral, and support services for vision, hearing, dental, health, and other support areas	L.A. Unified will provide access to school nurses, audiometrists, and professionals from other support areas at all UTK sites.
Children are provided meals and/or snacks	L.A. Unified will provide meals at no charge to all UTK students.
Systems hold individual classrooms accountable and monitor to ensure quality standards are being met	L.A. Unified already provides progress reports for all TK students in MISIS. UTK participants will also be included in attendance and enrollment dashboards. UTK participants who are English Learners will participate in ELPAC testing so the District will be able to monitor their English Development progress as students matriculate to Kindergarten and beyond.

We recommend using the following framework to monitor and evaluate the effectiveness of UTK in L.A. Unified, beginning during the early implementation of the UTK program. Additionally, based on the results from the TN-VPK and GA studies, we recommend following the first several cohorts

of L.A. Unified UTK participants through at least the end of elementary school to learn more about long-term effects of participation in the program.

- How many children are served by the program? What percentage of eligible children are participating in L.A. Unified's UTK program? What percentage of eligible at-risk children are participating in L.A. Unified's UTK program?
- Do participants of L.A. Unified's UTK program continue to enroll in L.A. Unified schools in subsequent years?
- Are participants ready for Kindergarten (based on readiness assessments, either formal or informal)? How does their readiness compare with students who did not enroll in L.A. Unified's UTK program?
- How do UTK participants compare with non-participants on measures of academic outcomes including grades, state test scores (in grades 3-6), and reading assessment scores?
- How do UTK participants compare with non-participants on non-academic outcome measures, including discipline referrals (for both major infractions and minor violations of rules), Individualized Education Program (IEP), rates of attendance and truancy, and grade retention?
- Is there evidence of differential effects and outcomes between different populations of students who participated in UTK? This could include (but is not limited to) differences in outcome by English language proficiency, race/ethnicity, gender, school location, and socioeconomic status.

Finally, it would be useful to maintain a collaborative sharing of information with other large, highly diverse districts in California as the state program is rolled out. While each district is different, there are many similarities, and all will be conducting programs similar enough to be consistent with the state guidelines. This sharing of practices, experiences, and outcomes will help L.A. Unified interpret its own data and adjust practices as needed to best serve these early childhood learners.

 $\label{lem:cond} \verb| \%20Universal \%20Early \%20Learning \%20 and \$20Expansion\_02222022\_REVISED.pdf|$ 

- ${\ensuremath{^3}}$  Tagawa February 2022 Presentation to the L.A. Unified Committee of the Whole
- <sup>4</sup> Parker, E., Diffey, L., & Atchison, B. (2018). "How States Fund Pre-K: A Primer for Policymakers." Education Commission of the States. https://www.ecs.org/wp-content/uploads/How-States-Fund-Pre-K\_A-Primer-for-Policymakers.pdf
- $^5$  Tate, E. (2021). "The Unintended Consequences of Universal Preschool." https://www.edsurge.com/news/2021-05-10-the-unintended-consequences-of-universal-preschool
- <sup>6</sup> Stavely, Z. (2018). "What can California learn from universal preschool in other states?"

https://edsource.org/2018/california-can-learn-from-other-states-expanding-preschool/605969

- http://www.first5coco.org/blog/2012/02/13/californias-kindergarten-readiness-act-now-what-2/
- $^{\rm 8}$  Tagawa, D. February 2022 Presentation to the L.A. Unified Committee of the Whole.
- <sup>9</sup> Ibid Tagawa (2022).
- <sup>10</sup> Universal Prekindergarten FAQs. https://www.cde.ca.gov/ci/gs/em/kinderfaq.asp
- <sup>11</sup> Friedman-Krauss, A.H., Barnett, W.S., Garver, K.A., Hodges, K.S., Weisenfeld, G.G., Gardiner, B.A., Jost, T.M. (2022). *The state of preschool 2021: State preschool yearbook. The National Institute for Early Education Research [NIEER]*. Rutgers University. https://nieer.org/wp-content/uploads/2022/04/YB2021\_Full\_Report.pdf
- $^{\scriptscriptstyle 12}$  Los Angeles Unified School District Early Childhood Education Division. "Our Programs: Transitional Kindergarten." https://achieve.lausd.net/Page/15507
- <sup>13</sup> California Department of Education. "California Preschool Learning Foundations." https://www.cde.ca.gov/sp/cd/re/psfoundations.asp
- <sup>14</sup> Ganon, S., Le, Q.T., & Thomas, A. (2018). *Transitional Kindergarten and Student Outcomes*. Independent Analysis Unit: Los Angeles Unified School District.
- Schweinhart, L.J. The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions. https://image.highscope.org/wp-content/uploads/2018/11/16053615/perry-preschool-summary-40.pdf
  The Carolina Abecedarian Project. https://abc.fpg.unc.edu/abecedarian-project
- <sup>17</sup> Durkin, K., Lipsey, M.W., Farran, D.C., & Wiesen, S.E. (2021). Effects of a Statewide Pre-Kindergarten Program on Children's Achievement and Behavior Through Sixth Grade. *Developmental Psychology*. https://doi.org/10.1037/dev0001301
- <sup>18</sup> Pion, G.M., & Lipsey, M.W. (2021). Impact of the Tennessee Voluntary Prekindergarten Program on children's literacy, language, and mathematics skills: Results from a regression-discontinuity design. AERA Open. https://doi.org/10.1177/23328584211041353
- <sup>19</sup> Durkin et al.
- <sup>20</sup> Parker et al.
- <sup>21</sup> Peisner-Feinerg, E., Van Manen, K., Mokrova, I., & Burchinal, M. (2019). Children's Outcomes through Second Grade: Findings from Year 4 of Georgia's Pre-K Longitudinal Study.

https://www.decal.ga.gov/documents/attachments/GAPreKEvalLongitudinalYr4ExSum.pdf

<sup>22</sup> Soliday Hong, S., Zadrozny, S., Walker, J., Love, E.N.G., Osborne, J.D., Owen, J.L., Jenkins, G., & Peisner-Feinberg, E. (2021). Longitudinal Study of Georgia's Pre-K Program: Third Grade Report Summary. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute.

https://www.decal.ga.gov/documents/attachments/GAPreKEvalLongitudinalYr5ExSum.pdf

- <sup>23</sup> Duncan, G. J., & Magnuson, K. (2013). Investing in preschool programs. Journal of Economic Perspectives, 27(2), 109-32
- <sup>24</sup> Phillips, D. A., Lipsey, M. W., Dodge, K. A., Haskins, R., Bassok, D., Burchinal, M. R., Weiland, C. (2017). The Current State of Scientific Knowledge on Pre-Kindergarten Effects. Retrieved from

https://www.brookings.edu/research/puzzling-it-out-the-current-state-of-scientific-knowledge-onpre-kindergarten-effects/

- <sup>25</sup> Washington, V. (2017). Universal Pre-K: What We Know, What We Need.
- https://www.cdacouncil.org/storage/documents/Media\_Room/Universal\_Pre-K\_What\_We\_Know-What\_We\_Need.pdf <sup>26</sup> Barnett, S., Epstein, D.J., Friedman, A.H., Sansanelli, R.A., & Hustedt, J.T. (2009). *The state of preschool 2009: State preschool yearbook. The National Institute for Early Education Research [NIEER]*. Rutgers University.
- <sup>27</sup> Friedman-Krauss, A.H., Barnett, W.S., Garver, K.A., Hodges, K.S., Weisenfeld, G.G., Gardiner, B.A., Jost, T.M. (2022). *The state of preschool 2021: State preschool yearbook. The National Institute for Early Education Research [NIEER]*. Rutgers University. https://nieer.org/wp-content/uploads/2022/04/YB2021\_Full\_Report.pdf
- <sup>28</sup> California Department of Education. https://www.cde.ca.gov/ci/gs/em/kinderfaq.asp
- <sup>29</sup> Los Angeles Unified School District. "Asynchronous Courses on MyPLN Early Childhood Division."

laschoolboard.org/iau

Research Spotlight: UTK | 9

 $<sup>^1\,</sup>https://www.gov.ca.gov/2021/07/12/california-roars-back-governor-newsom-signs-100-billion-california-comeback-plan-to-accelerate-states-recovery-and-tackle-persistent-challenges/$ 

<sup>&</sup>lt;sup>2</sup> "Universal Early Learning and Expansion." Presentation to the L.A. Unified Committee of the Whole by Dr. Dean Tagawa, February 22, 2022. https://boe.lausd.net/sites/default/files/Tab%201-