

Responding with Urgency: Mitigating Learning Loss

Introduction

Since the pandemic shuttered school doors in March 2020, researchers have estimated that Tennessee's public school students have lost almost a third of a year in reading and half a year in math. In an October research brief on estimated learning loss, the Center for Research on Education Outcomes (CREDO) predicted that at least one school in Tennessee would face the largest estimated learning loss of 425.72 days, and the average learning loss for the entire state of Tennessee would be 87.58 days. These numbers speak to the difference in achievement that would have occurred, absent a pandemic, and the estimated measure of student learning at the conclusion of the 2020-21 school year.¹ While national research regarding learning loss varies, policymakers should expect students to have lost anywhere between three months and one entire year of learning in core subjects.

When students were no longer allowed in a physical school building, schools scrambled to educate their students remotely. Undoubtedly educators across the state stepped up to do heroic work in supporting their students remotely, yet preliminary research from other countries has shown that remote learning will result in learning loss for students, especially disadvantaged students.² Lower-income students are less likely to have access to a conducive learning environment, whether it is in-person or virtual.³ At home, they may not have a quiet space with minimal distractions and will likely need to share devices with family members. Additionally, high-speed internet and parental academic supervision are not always a given for low-income students.

This report asks policymakers in Tennessee to answer three questions, responding to each with urgency:

1. Are we measuring learning loss?
2. What are we measuring?
3. What do we do in response to learning loss?

While each question is no more or less important than the next, this report seeks to provide recommendations for the third question, "What do we do once determining learning loss?"

¹The Center for Research on Education Outcomes. (2020). *Estimates of Learning Loss in the 2019-2020 School Year*. Stanford University. https://credo.stanford.edu/sites/g/files/sbiybj6481/f/short_brief_on_learning_loss_final_v.3.pdf

²Dorn, E., Hancock, B., Sarakatsannis, J., and Viruleg, E. (2020). *COVID-19 and Learning Loss - Disparities Grow and Students Need Help*. McKinsey & Company. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-learning-loss-disparities-grow-and-students-need-help>

³Dorn, E., Hancock, B., Sarakatsannis, J., and Viruleg, E. (2020). *COVID-19 and Student Learning in the United States: The Hurt Could Last a Lifetime*. McKinsey & Company. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime>

First Question: Are we measuring learning loss?

At the very least, every single district must respond to this question with a simple and transparent “yes” or “no.”

Only since the education reforms of the early 21st century have parents and education advocates had robust information on how schools were serving students, especially those from low-income backgrounds, students of color, English learners and students with disabilities. At this moment, the least we can do is ask if schools are periodically assessing the educational progress of all students. In an immediate sense, by measuring academic gains/losses, parents and advocates knew whether or not students are getting critical opportunities and resources. This information will also allow district decision-makers to identify which schools need additional support and resources to meet the needs of their students. Additionally, measuring learning gains during this time will allow policymakers to identify the actions that schools took to achieve these learning gains in such a challenging time. Over 5,000⁴ Tennesseans have lost their lives from Covid, which means they leave behind countless school-aged family members whose life has been upended by this pandemic. If there ever was a time to give our students personalized and informed support academically, that time is now.

⁴Statistics retrieved from the Tennessee Department of Health on December 10, 2020. <https://www.tn.gov/health/cedep/ncov.html>

Second Question: What are we measuring?

Even in an academic year that is not impacted by a global pandemic, schools should be measuring student progress throughout the year, not waiting until the summative statewide assessment to evaluate students. Considering that students need support this year beyond their academics, educators need to know exactly how to provide that support to their students - making guesses will not cut it. Formative assessments will inform student progress and gaps so that educators will more efficiently and effectively be able to support students throughout the year.

Of course, formative assessments are only as strong as the learning plans developed from assessment results. The state should mandate that each district make public the results of formative assessments in the current academic year, at least at the district level, if not at the school level, broken out by subgroups. In the immediate future, these data can inform parents and policymakers of the current academic progress for each grade span and subgroup and allow more stakeholders to target support to students.

Third Question: What do we do in response to learning loss?

Not every student will see the dramatic learning loss that researchers are anticipating. Some may actually experience positive outcomes fueled by direct and timely support at home. Yet many students have not done well with remote instruction, as they may not have had access to learning environments that were conducive to rigorous learning.

Once schools identify the students who are struggling the most, what are they doing with that information? What immediate decisions are they making to remedy any losses? How is the state supporting these passionate efforts? This report seeks to offer potential solutions as the state responds to that last question. Critically, this report provides a rating to each solution based on its urgency in responding to learning loss. Solutions include extending the school day, implementing competency-based learning, encouraging high-dosage tutoring or planning for high-quality summer school options. If the ultimate goal is for schools to identify those students who need the most support and immediately develop a plan to support those students, this report will provide examples for how the state may support schools in that ultimate goal.

Extending the School Day

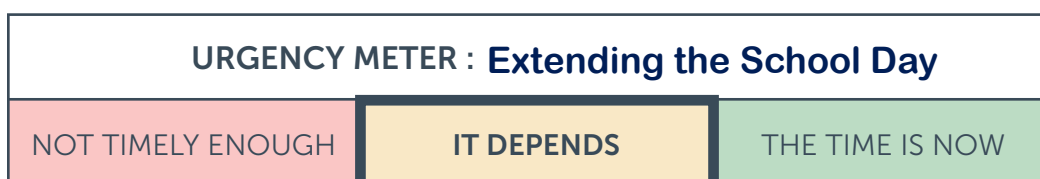
Extending the school day, with regard to which students are served and how, can mitigate learning loss. When Florida implemented an extended school day for a few of its low-performing schools, then used that time to provide an additional hour of reading instruction, participating students gained, on average, up to three months of additional literacy instruction.⁵

While this research is encouraging, the urgency of making this a reality depends on the logistics of how districts implement an extended school day.⁶ If only some students in any one school are expected to stay at the school longer, how will transportation schedules be redesigned to transport students at different times? How will schools ensure the students who are assigned to receive additional instruction stay engaged if they are not able to physically be at school? If all students in a school are participating, how will educators be compensated for their additional time in front of students?

Additionally, in TennesseeCAN's 2020 school leader survey, 51.20% of respondents - a 9.22% decrease from the previous year - said they would support an extended school year or school day given the necessary resources and state support. A full 58.33% of district leader respondents - over 16% less than last year - said they would also support an extended school year or school day. These results reinforce the critical nature of perfecting the logistics around extended school day so that students in Tennessee may receive the same outcomes as the students in Florida's extended school day program. Whether or not extended school days mitigate learning loss depends on the support that the state gives districts regarding the logistical changes required in implementing an extended school day.

⁵David Figlio, Kristian Holden, Umut Ozek (2018). *Do Students Benefit from Longer School Days? Regression Discontinuity Evidence from Florida's Additional Hour of Literacy Instruction*. CALDER Working Paper No. 201-0818-1

⁶Zhou, A. (2018, August 16). *Florida told its low-scoring schools to make their days longer. It helped, new research finds*. Chalkbeat. <https://www.chalkbeat.org>.



Competency-Based Learning

Students currently progress from one learning goal to another based on time spent in the classroom and ultimately whether or not their grades are strong enough to progress to the next grade level. Yet, hypothetically speaking, there are students in sixth grade who, if provided the opportunity, could master geometry concepts not found until they get to the ninth grade. Conversely, there are students in fifth grade who are reading on a second grade level, which is likely the reason they are struggling with fifth grade math, science and/or social studies. The goal of competency-based learning, also known as mastery-based learning, is to personalize learning based on a student's current reality and develop a plan that accelerates learning to and through grade level. Teachers target assignments to students based on their current mastery, then create a learning plan that accelerates their academic progress, all while students actively join their teachers in monitoring progress to goals.⁷ On a larger scale, competency-based learning does away with grade levels and instead, student progress is based on their mastery of the material.

⁷Williams, H.P., Diffenbaugh, M., and Brady, K. (2018). *Idaho Mastery Education Network (IMEN): From Policy, Planning, and Design to Successful Implementation*. Idaho State Department of Education. <https://www.sde.idaho.gov/mastery-ed/imen.html>

If competency-based learning had been in practice in Tennessee before the global pandemic closed schools in March 2020, schools and students would have not missed a beat. Once schools ensured internet accessibility for their students and set up remote learning opportunities, students would have known daily what their learning expectations were. From an individualized dashboard populated with assignments from teachers, students would participate in various assignments and subsequent assessments, all while measuring progress to their individualized learning expectations. This system would not only provide flexibility to schools in scheduling students for in-person and virtual learning, but would have truly engaged families as allies in their student's learning journey well before the pandemic forced them into that role in their homes. Unfortunately, implementing such an individualized and technology-savvy system requires a heavy lift in not just creating this system, but also in changing educator practice and creating the statutory flexibility for it to thrive. Considering Tennessee students need an immediate solution for learning loss, and implementing competency-based learning will take time they cannot afford, competency-based learning is the least urgent statewide solution for mitigating learning loss.



High-Dosage Tutoring

High-dosage tutoring (HDT) is wildly different from the traditional tutoring concept. Traditional tutoring resembles multiple individuals administering sporadically any form of set-and-get tutoring to a student for just a few hours each week. This traditional form of tutoring has not been proven successful.⁸ Alternatively, high-dosage tutoring resembles a one-on-one relationship between the same trained tutor and the same student or a very small group of students, at least three times a week, or for about 50 hours over a semester. HDT has been shown to be successful, particularly for students of color.⁹ On average, the effect sizes are among the largest of all interventions seen in education.¹⁰ For HDT, teachers quickly diagnose gaps in skills and knowledge and provide tutors with that information so the content covered in a tutoring session is relevant and timely. This ensures not only a more intentional tutoring experience, but also provides an opportunity for a student to develop a relationship with their tutor, thus giving schools another opportunity to meet students' nutritional, social, emotional and mental health needs.

⁸National Center for Education Evaluation and Regional Assistance. (2005) *When Schools Stay Open Late: The National Evaluation of the 21st Century Community Learning Centers Program*. U.S. Department of Education Institute of Education Sciences, <https://www2.ed.gov/rschstat/eval/other/cclcfinalreport/cclcfinal.pdf>

⁹Fryer, Roland G., Jr. and M. Howard-Noveck. (2018) *High-Dosage Tutoring and Reading Achievement: Evidence from New York City*. Journal of Labor Economics.

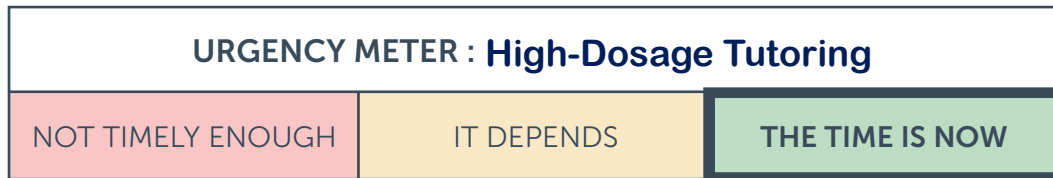
¹⁰Nickow, A., Oreopoulos, P., & Quan, V. (2020) *The Impressive Effects of Tutoring on PreK-12 Learning: A Systematic Review and Meta-Analysis of the Experimental Evidence*. NBER.

High-Dosage tutoring is...	Traditional tutoring is...
...a scheduled, required and intentional activity in which a substantial amount of time is set aside each week for the sole purpose of tutoring.	...an inconsistently scheduled activity that happens after school when students just want to go home and call it a day.
...a timely attempt to accelerate learning alignment with school curriculum and is informed by the student's current individualized knowledge and skills.	...an attempt to remediate after the classroom's content has progressed beyond the point when the student needed support.
...fueled by trained and supported tutors who are committed to a sustained strong relationship with their student(s) and respective teachers of record.	...reliant on unpaid volunteers who have not been trained on the curriculum and/or engagement strategies.support.

If Tennessee invests in high-dosage tutoring to combat learning loss, they must design a system that not only prioritizes the quality of tutors but also offers consistent training, support and feedback for those tutors. Whether eligible tutors include classroom teachers, teaching assistants, retired educators, recent college graduates or paid volunteers, all tutors must be supported once they begin the work. These tutors should be treated as professionals working hand-in-hand with respective teachers of record. High-dosage tutoring may be best thought of like a class: students receive tutoring daily, for a full class period, during the normal school day, yet their lessons are informed by progress to mastery of learning goals.¹¹

¹¹Ander, R., Guryan, J., & Ludwig, J. (2016). *Improving Academic Outcomes for Disadvantaged Students: Scaling Up Individualized Tutorials*. The Hamilton Project. https://www.hamiltonproject.org/assets/files/improving_academic_outcomes_for_disadvantaged_students_pp.pdf?_ga=2.222761307.1138658413.1604344093-140094867.1603202115

The biggest lift for such a program will be quality assurance, setting up a system that not only recruits the most talented tutors, but also supports them throughout the school year. The state most certainly has the ability to create such a program, and if done with urgency, may be the most effective and immediate solution to combating learning loss.



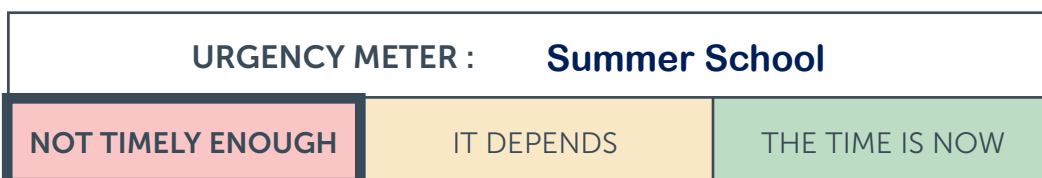
Summer School

Voluntary, multi-week summer school - whether online or in-person - may provide critical opportunities for students to hone the knowledge and skills gained in the current academic year and also prepare for the subsequent academic year. The research on summer school shows promising benefits, especially for low-income students who experience the greatest effects of the summer slide. Research has shown that students who participate in some high-quality, voluntary, multi-week summer learning programs experience significant academic gains in reading and math that can lessen the effects of learning loss.¹² Schools and families have worked hard to ensure consistent learning throughout the pandemic, yet these efforts will likely need to be expanded into the summer for many students.

¹²Augustine, C., McCombs, J.S., Pane, J., Schwartz, H., Schweig, J., McEachin, A., & Siler-Evans, K. (2016). *Kids Who Attend More Benefit More: Voluntary Summer Learning Programs*. Santa Monica, CA: RAND Corporation. https://www.rand.org/pubs/research_briefs/RB9924.html.

The state may provide high-quality, voluntary, multi-week summer learning programs by expanding existing summer-school programs or working with agencies that run summer camps and youth programs, essentially adding academics to their activities. The state should research which summer learning programs have had the greatest attendance and the greatest results, as any voluntary program will have to prove why they are the programs to earn the privilege of serving students.

Of course, the ultimate goal of summer learning programs is to close opportunity gaps, and doing this in-person in large groups of students during the regular academic year has already proven to be a challenge. Additionally, summer school programs are just that - summer programs. By design, summer school programs are opportunities to remediate what a student should have already mastered months prior when the classroom's content has progressed beyond the point when the student needs support. Therefore, summer school programs are not an urgent solution to mitigating learning loss in the 2020-21 school year.



Summary

The state has essentially three possible options to mitigate learning loss in the 2020-21 school year: extending the school day, high-dosage tutoring or multi-week summer school. Extending the school day for an entire school may not be popular among staff, therefore districts may need to decide whether or not to implement an extended school day for just some schools or some students. If districts choose the latter, logistical planning will be the greatest impediment to ensuring this option is a success. Summer learning programs have a history of implementation in the state, making logistical planning of these programs a bit easier. Unfortunately, waiting until the summer to mitigate learning loss is just too late. A more urgent solution in mitigating learning loss may be high-dosage tutoring, but the state will have to actively combat the expectation that traditional tutoring will suffice. If the state can build a quality-controlled tutoring program at the state level, high-dosage tutoring may be the best option in a global pandemic because of its intentional design in serving students in smaller groups, therefore decreasing the risk of spreading the virus. Unlike summer school that serves large groups of students in the same school with few adults, high-dosage tutoring sessions are personalized, with a student-to-tutor ratio of one-to-one, two-to-one or three-to-one at most. While this option may be the most feasible, it is also the most costly, as the state will need to provide funding for the salaries of tutors and recruiting/training those tutors.