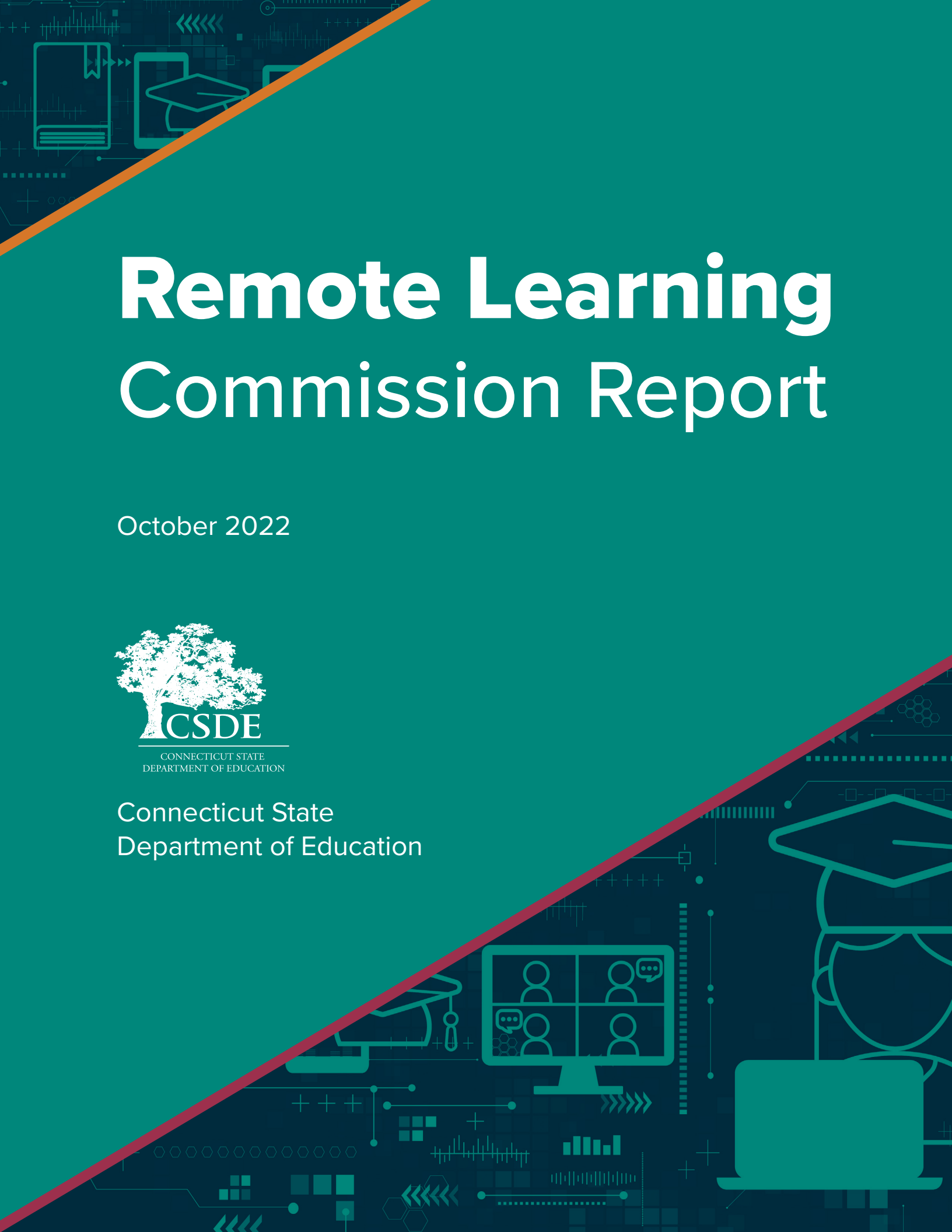
Remote Learning Commission Report

October 2022

CSDE
CONNECTICUT STATE DEPARTMENT OF EDUCATION

Connecticut State Department of Education



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Acknowledgments

This Remote Learning Commission report includes the contributions of numerous professionals. It was through their leadership, hard work and commitment to the possibilities for reimagining teaching and learning in remote environments that this report was completed. In partnership, the Connecticut State Department of Education (CSDE) and the Remote Learning Commission members listed below analyzed research, reviewed local research findings, and engaged other state education agencies (SEAs) and providers of remote learning to support the initial recommendation for what a statewide remote learning school for Connecticut should embody.

Remote Learning Commission Members

- Commissioner Charlene M. Russell-Tucker – Chairperson
- Ingrid M. Canady, Executive Director, State Education Resource Center (SERC) — Facilitator

Appointed Commission Members

- Doug Casey, Connecticut Commission for Educational Technology
- Katharyn Dias, Connecticut Education Association (CEA)
- Dr. Karen DuBois-Walton, Connecticut State Board of Education
- Dr. Charles Dumais, RESC Alliance
- Katharine Gabrielson, ConnCASE
- Ed Klonoski, Charter Oak State College
- Tim Larson, Connecticut Office of Higher Education (OHE)
- Dr. Michelle Levy, Connecticut Office of Early Childhood (OEC)
- Lauren A. Mancini-Averitt, American Federation of Teachers-Connecticut (AFT)
- Dr. Rose Anne O'Brien Vojtek, Assistant Executive Director, Connecticut Association of Schools (CAS)
- Frances Rabinowitz, Connecticut Association of Public School Superintendents (CAPSS)
- Dr. Evelyn Robles-Rivas, Connecticut Association of Latino Administrators and Superintendents (CALAS)
- Lon Seidman, Connecticut Association of Boards of Education (CABE)
- Amy Wiltsie, State Education Resource Center

Special thanks to Connecticut State Department of Education Chief Academic Officer Irene E. Parisi and Chief Performance Officer Ajit Gopalakrishnan for their support of the Remote Learning Commission.

Executive Summary

Pursuant to Section 387 of Public Act 21-2, June Special Session (JSS), the Connecticut State Department of Education established the Connecticut Remote Learning Commission to analyze and provide recommendations concerning the provision of remote learning to public school students enrolled in grades kindergarten to 12, inclusive, that is maintained and under control by the Connecticut State Board of Education. The commission shall create a report that includes an analysis and recommendations concerning (1) the impact of remote learning; (2) the feasibility of creating a statewide remote learning school that will serve students in grades kindergarten through 12; (3) the costs associated with establishing one or more public statewide or regional remote learning schools; (4) the fiscal impact that various remote learning models could have on local and regional school districts; and (5) options to ensure that students who are receiving or participating in remote learning have adequate parental or adult supervision, educational support, technical assistance, continuity of attendance, and engagement.

The Remote Learning Commission met 11 times virtually over the course of 2021-22. Agenda topics included: (1) a review of the 2020-21 Statewide Summative Assessment Report; (2) presentations from Connecticut districts to understand statewide perspective and Massachusetts, Virginia, and Florida state agencies to understand the national perspective on remote learning; (3) establishing work groups and breakout sessions to gather information and research; (4) a presentation from the Connecticut COVID-19 Education Research Collaborative (CCERC); and (5) development of the Remote Learning Commission Feasibility Report.

Recommendations

After conducting all research, surveys, interviews, computations, and analysis, the members of the Remote Learning Commission have concluded that the findings regarding the identified scope of the Commission's task show the following:

1. **Feasibility of Creating a K-12 State-Controlled Remote Learning School**
   The Remote Learning Commission recommends that a statewide remote learning school that serves students in grades kindergarten to 12, inclusive, does not have the ability to meet the expectations for teaching and learning, instruction, assessment, and accommodations with wrap-around supports to students and families.
2. **Adequate Support Services**
   The Remote Learning Commission recommends that a statewide remote learning school that serves students in grades kindergarten to 12, inclusive, does not have the ability to provide options to ensure that students who are receiving or participating in remote learning have adequate parental or adult supervision, educational support, technical assistance, continuity of attendance, and engagement.
3. **Fiscal Impact of Remote Learning**
   The Remote Learning Commission recommends not to embark on the process of establishing a full-time comprehensive, statewide remote learning school that serves students in grades kindergarten to 12, inclusive, at this time due to the projected annual cost of $576,396,770.

Introduction

Pursuant to Section 387 of Public Act 21-2, JSS, the Connecticut State Department of Education (CSDE) established the Connecticut Remote Learning Commission to analyze the impact of remote learning and provide recommendations concerning the provision of remote learning to public school students enrolled in grades kindergarten to 12, inclusive. This report is the direct outcome of this analysis with recommendations, constraints, and risks. The Connecticut Remote Learning Commission examined the proposed solution to providing a statewide remote learning school to students in grades kindergarten to 12 and evaluated whether it is possible given certain constraints.

The Connecticut Remote Learning Commission report is organized around seven sections, including the methodology for preparing this report, executive summary, and a glossary:

1. Methodology
2. Executive Summary
3. Summary of Findings - Impact of Remote Learning
4. Feasibility of a Statewide Remote Learning School — Adequate Support Services
5. Fiscal Impact of a Statewide Remote Learning School
6. Recommendations
7. Glossary of Essential Terms

Timing

- June 2021 – July 1, 2022

Objectives of the Study

- Analyze the impact of remote learning provided as a result of the COVID-19 pandemic during the school years commencing July 1, 2019, and July 1, 2020.
- Provide recommendations concerning the feasibility of providing a statewide remote learning school to public school students enrolled in grades kindergarten to 12.
- Analyze the fiscal impact that various remote learning models could have on local and regional school districts.

Criteria for Preparing this Report

- Impact of remote learning.
- Feasibility of a statewide remote learning school - adequate support services.
- Budget assumptions about the cost of a statewide remote learning school.
- Fiscal impact that various remote learning models have on districts.

Methodology

The methodology adopted for preparing the study is as follows:

1. Establish the Connecticut Remote Learning Commission pursuant to Section 387 of Public Act 21-2, JSS. The Commissioner engaged in regular meetings to discuss the current and future state of education.
2. Engage local education agencies (LEAs) and other state education agencies for the purpose of learning how other states developed and implemented remote learning schools and gather and review stakeholder feedback.
3. Conduct extensive analyses of attendance data for remote and in-person days and analyze long-term state assessment data using student learning models during 2020-21. In addition, the CSDE commissioned an external evaluation through the Connecticut COVID-19 Education Research Collaborative (CCERC) to study the impact of the remote learning offered during the school years commencing July 1, 2019, and July 1, 2020.
4. Organize commission work groups by a framing question and topic as outlined in Public Act 21-2, JSS. Four work groups were created: Research and Design, Teaching and Learning, Infrastructure, and Focus Group Design.

Meeting recordings, agendas, and minutes are available on the Remote Learning Commission (ct.gov) website.

Summary of Findings

The Impact of Remote Learning

Legislative Requirement

Section 387 of Public Act 21-2, JSS, requires an analysis of the impact of remote learning on "(A) the educational attainment of students in elementary, middle and high school, (B) students' physical and emotional development, access to special services including mental health, and access to food security and nutrition, and (C) the quality of instructional delivery."

Subsection (b) of Section 389 of the same public act charges the CSDE to "conduct a comprehensive audit of the remote learning provided by local and regional boards of education as a result of the COVID-19 pandemic during the school years commencing July 1, 2019, and July 1, 2020." This comprehensive audit must include an examination of the following:

1. whether and how local and regional boards of education initially provided remote learning during the beginning of the COVID-19 pandemic, with a focus on the technological capabilities or limitations at such time;
2. the curriculum used as part of remote learning and whether students were able to complete the grade-level curriculums;
3. the level of preparation or training in remote learning that educators received before and during the provision of remote learning during such school years;
4. the level of improvement, if any, of the provision of remote learning from the school year commencing July 1, 2019, to the school year commencing July 1, 2020;
5. rates of student absenteeism during the COVID-19 pandemic relative to rates of student absenteeism before the COVID-19 pandemic; and
6. student academic performance during the COVID-19 pandemic relative to student academic performance before the COVID-19 pandemic.

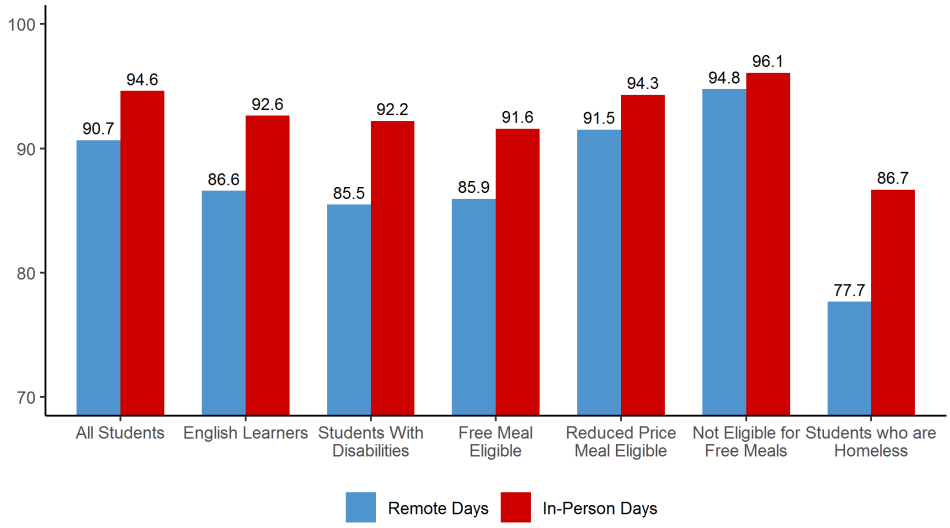
Process

The CSDE is answering these broad and extensive topics through three main approaches: (1) attendance analyses; (2) state assessment results; and (3) external evaluation.

The approaches and the lessons learned to date are discussed at greater length below.

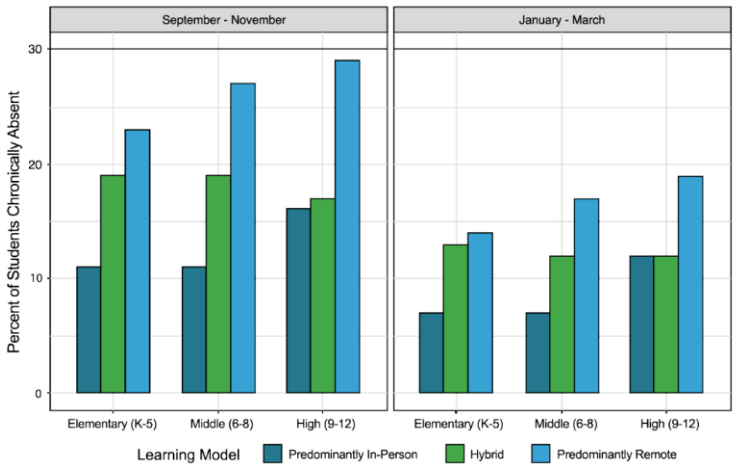
1. **Attendance Analyses**
   The CSDE began collecting monthly attendance data starting in September 2020 for the 2020-21 school year. Before that, attendance data were only collected at the end of the year. Given that students could learn in a variety of formats (i.e., in-person, hybrid, remote), the CSDE instituted this monthly collection to track student attendance on an ongoing basis throughout the year and support districts to implement a range of interventions designed to increase student attendance. This collection separately tracked attendance on remote versus in-person school days. These data have been analyzed and reported on EdSight. The 2020-21 data have also enabled the CSDE to classify students based on their extent of in-person attendance, i.e., in-person (if more than 75% of days are in person), hybrid (if between 25 and 75% are in person), and remote (if less than 25% are in person). These data have yielded several important insights:
   - Chronic absenteeism in 2020-21 was substantially higher than in any prior year; this rate nearly doubled from 10.4% in 2018-19 to 19.0% in 2020-21.
   - Attendance rates on remote days lagged those on in-person days for most student groups. See figure 1.

Figure 1. Attendance Rates in 2020-21



- Nearly one-quarter of students were in-person, i.e., more than 75% of school days or at least 16 out of an estimated 20 school days in an average month were in person. Nearly half of students were hybrid learners, i.e., between 25 and 75% of school days were in person. Nearly one-quarter of students were fully/mostly remote, i.e., below 25% or fewer than five out of an estimated 20 school days in an average month were in person.
- Students eligible for free/reduced-price meals and English learners tended to be remote at greater rates than their peers. While statewide about 26% of all students (approximately 134,000) were remote, 33% of English learners and 37% of those eligible for free or reduced-price meals were remote for the entire school year.
- Chronic absence was most prevalent among predominantly remote students and least prevalent among in-person students, with rates for hybrid students falling in between.
- The gap in chronic absence rates between in-person and hybrid students was less pronounced for high school students relative to elementary or middle school students.

Figure 2. Chronic Absence Across Learning Models by School Level and Term



- Chronic absence rates were higher for students who were receiving free or reduced-price meals, Black or Hispanic, English learners, identified as having a disability, and male.

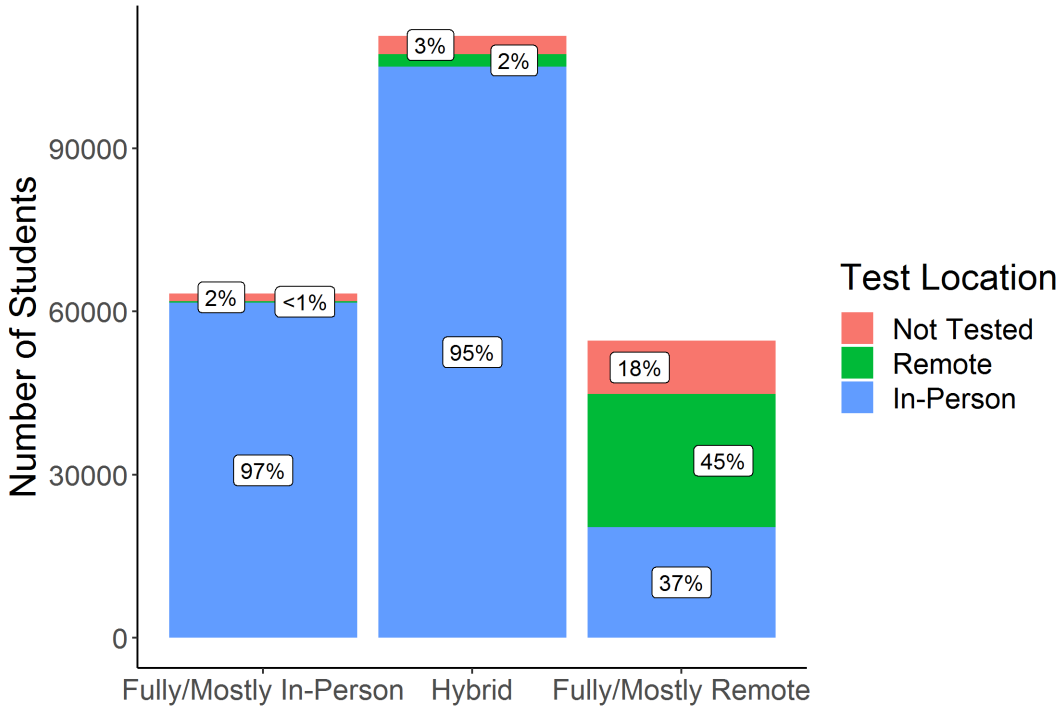
These attendance data were also used at multiple times during the pandemic to provide food benefits (Pandemic Electronic Benefits Transfer/P-EBT) to students from low-income families.

2. State Assessment Results

Due to the COVID-19 pandemic, the CSDE received approval from the United States Department of Education (USED) to waive both state testing and the Next Generation Accountability System for the 2019-20 school year. In June 2020, the CSDE provided Sensible Assessment Practices to offer guidance to educators on how to use available data to "assess" their incoming students when schools re-opened in September without necessarily having to test them. The 2020-21 school year presented a unique set of challenges, as many of Connecticut's students spent a significant part of the year learning remotely. Considering these circumstances, the USED approved the CSDE's request to waive accountability for a second consecutive year. Still, despite ongoing disruptions to learning due to the pandemic, the CSDE felt it was vital to reaffirm Connecticut's commitment to equity and administer all statewide assessments during the 2020-21 school year. Having these scores allows for the monitoring of long-term trends and the evaluation of the full impact of the pandemic on student achievement and growth. It also provides accurate data to target support and resources where they are most needed to address and combat the negative impact of this pandemic on student learning. Moreover, the aforementioned monthly attendance data enabled the CSDE to analyze the state summative assessment results based on the student learning model (i.e., in-person, hybrid, or remote).

Though the CSDE received a waiver from the USED not to implement the Next Generation Accountability System for the 2020-21 year, Connecticut schools achieved over 93% assessment participation in grades 3-8. Nearly 82% of students tested in-person (which was strongly recommended) on Smarter Balanced, while 11.5% of students tested remotely. In-person test participation was strongest for students who learned fully/mostly in-person (97%) or in a hybrid (95%) model. Conversely, only 37% of fully/mostly remote learners took the exams in-person, while 45% of fully/mostly remote learners took the Smarter Balanced exams remotely (see figure 3).

Figure 3. Test Participation Based on Learning Model and Test Location

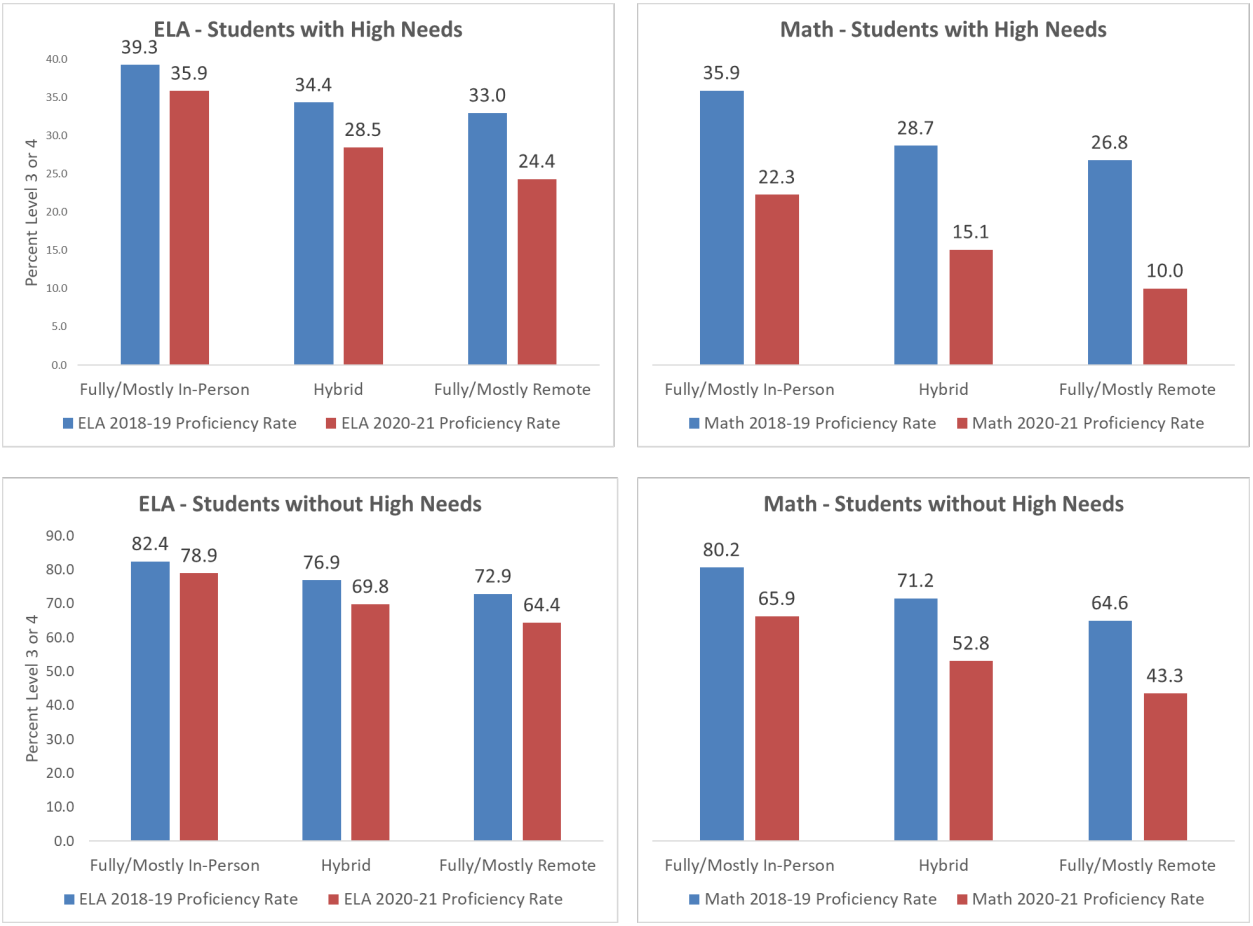


In light of the wide variations in school and student-learning models and differences in test participation based on learning model, the CSDE used "matched cohort growth" (i.e., growth of same students from one grade to another) when feasible to evaluate how growth during the pandemic was different from growth before the pandemic. Further, results are disaggregated by a student's learning model (i.e., fully/mostly in-person, hybrid, fully/mostly remote) and only those scores from students who tested in-person were included. Lastly, given the variations in learning models and test participation across student groups, comparisons are made within student groups (e.g., students with or without high needs).

The specialized analyses by the CSDE revealed that:

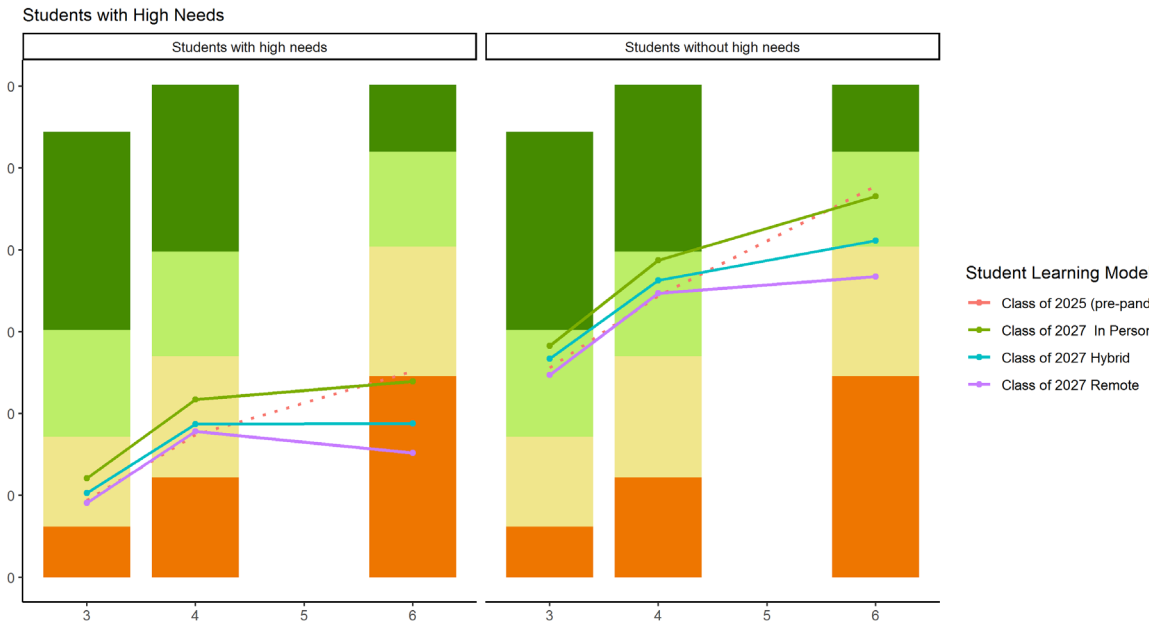
- During the pandemic, in all grades and most student groups, students who learned fully/mostly in-person lost the least ground academically while those who learned in hybrid or fully/mostly remote models showed substantially weaker achievement and growth.
- This pattern held true for students with high needs and students without high needs. A similar pattern is seen in all grades and most student groups.
- While the academic impacts were seen in all subjects, the observed differences were largest in math.
- See figure 4, which illustrates the declines in proficiency rates over a two-year period for students with high needs and those without. Among both groups of students, the greatest declines are seen among students learning remotely.

Figure 4. Matched Cohort (2018-19 to 2020-21): Proficiency Rates (Grades 5-8 Combined) by Learning Model and High Needs Status



Another illustration of the impact of the pandemic on student growth is presented in figure 5.

Figure 5. Matched Cohort Math Achievement Trend in Grade 6 in 2020-21



These findings and several other observations are documented in the full report.

This figure shows the achievement trajectory of sixth-graders from their time in third grade. The dotted line shows a pre-pandemic time period (i.e., from third grade in 2015-16 to sixth grade in 2018-19), while the three solid lines show the achievement trajectory for students during the pandemic based on their learning model. Though in-person and hybrid students in 2020-21 started higher in grade 3 than their pre-pandemic peers, in grade 6 their achievement lags that of their pre-pandemic peers. This pattern is shown to hold for students with high needs and students without high needs. The average scale scores for students in the hybrid and remote learning models have not increased from grade 4 to grade 6 for students with high needs.

Please review the full assessment summary report for a more in-depth discussion of these and other findings.

3. **External Evaluation**

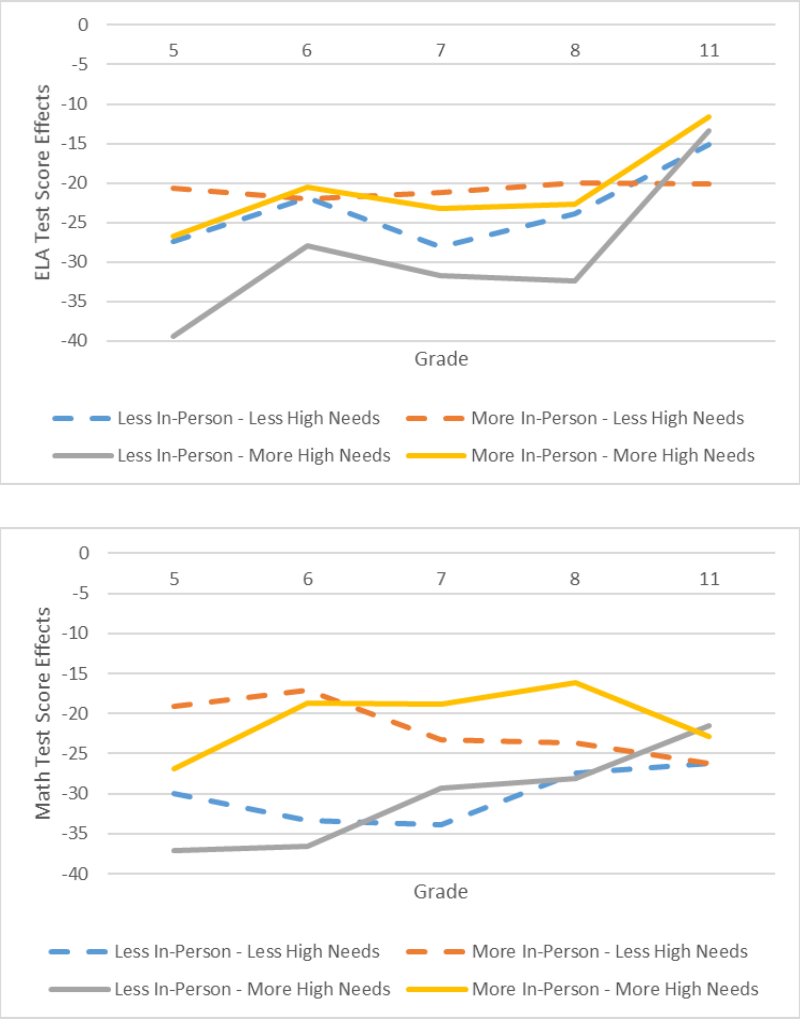
   To evaluate the numerous investments being made with federal COVID relief funds, the CSDE partnered with public and private higher education institutions in Connecticut to establish a new research initiative called the Connecticut COVID-19 Education Research Collaborative. One of the projects of this collaborative is to conduct the remote learning audit required in Section 389 of Public Act 21-2, JSS, and the robust impact analyses required in subsection (b)(1)(A) of Section 387 of the same act. Based on responses to a call for proposals, a team composed of researchers from Yale University and the University of Connecticut was selected to conduct this audit and the accompanying analyses.

Findings

Given the breadth of the topics to be investigated, the researchers leveraged administrative data from the CSDE and supplemented it with additional data collection directly from districts and from teachers. For example, questions relative to the impact of remote learning on enrollment, attendance, and test scores can be answered using quantitative data from the CSDE. Data to answer other questions required in statute (e.g., whether and how remote was provided initially, the curriculum used, the level of preparation or training educators received, or the access to special services, including mental health) are not available to the CSDE. Therefore, the researchers conducted a comprehensive district inventory, a teacher survey, and focus groups to solicit the breadth of perspectives.

Preliminary analyses of the quantitative data confirm initial findings from the CSDE analyses and bring greater insights. Fig-ure 6 (ELA on the left and math on the right) shows that after controlling for prior achievement, growth, and student de-mographic characteristics, students who were offered less in-person learning showed greater academic learning losses.

Figure 6. Test Score Effects by High Needs Share and In-Person Opportunity



This held true in districts with greater proportions of high-needs students (solid lines) and in districts with lesser proportion of high-needs students (dotted lines). The disparities were greater in math for both types of districts. Interestingly, in both subjects, the differences in student achievement between districts offering more in-person instruction versus those offering less in-person instruction tended to disappear in grade 11. This finding is similar to chronic absenteeism findings, where the gap in chronic absence rates between in-person and hybrid students was much less pronounced for high school students relative to elementary or middle school students. Taken together, they seem to suggest that some extent of remote learning opportunities, if done well, can be justified only at the high school level and not at the elementary or middle school levels.

Statewide analysis and survey findings determined that during the pandemic, in all grades and most student groups, students who learned fully/mostly in-person lost the least ground academically while those who learned in hybrid or fully/mostly remote models showed substantially weaker achievement and growth.

Feasibility of a Statewide Remote Learning School – Adequate Support Services

Legislative Requirement

Section 387 of Public Act 21-2, JSS, calls for an assessment of the "feasibility of creating a statewide remote learning school that will be maintained under the direction and control of the State Board of Education and serve students in grades kindergarten to 12, inclusive…" Section 387 of Public Act 21-2, JSS further requires the remote learning school design to provide options to ensure that students who are receiving or participating in remote

learning have adequate parental or adult supervision, educational support, technical assistance, continuity of attendance, and engagement.

The statute provides some parameters around such a "school," and members of the Remote Learning Commission have made further assumptions to provide a meaningful estimation of its scope.

Process

To determine feasibility, commission members analyzed various remote learning models. The law requires that the statewide remote learning school offer rigorous coursework and a rigorous curriculum aligned with curriculum guidelines approved by the Connecticut State Board of Education.

To further determine feasibility, the commission reviewed the requirements for high-quality curriculum and instruction based on diversity, equity, and inclusion (DEI) research and determined best practices for providing equitable access and support essential to any education program.

The following list further outlines additional requirements and expectations researched for consideration to ensure a high-quality learning design model.

- Connecticut certified teachers and administrators.
- System of support responsive to the needs of the whole child.
- Alignment with Connecticut Core Academic Standards, Connecticut Standards for Remote Learning, International Society for Technology in Education (ISTE) standards for effective use of technology, model curricula, and other curricula guidance.
- Student accountability for achieving the same rigorous high standards of learning, including statewide assessments.
- Use of effective research and best practices pedagogy.
- Use of Common Core of Teaching.
- Use of Common Core of Leading.
- Use of Connecticut Code of Conduct.
- Use of Connecticut Teacher and Administrator Evaluation.
- Use of Professional Learning Standards (Connecticut and/or Learning Forward).
- Use of Collaborative for Academic, Social, and Emotional Learning (CASEL) and the CSDE Social, Emotional and Intellectual Habits Framework.
- Establish appropriate teacher/student ratio (not to exceed in-person ratios but with necessary adjustments for pedagogical differences and learning platforms factors).

Task 1: Analysis of the Design of Remote School Models

Public Act 21-2, JSS, defines remote learning as instruction by means of one or more internet-based software platforms as part of a remote learning model. Students and educators are not physically present in a traditional classroom environment. Instruction is relayed through technology, such as a learning management system with embedded tools like discussion boards, video conferencing, online assessments, and teacher/administrator dashboards to monitor progress from remote locations.

Guided by this definition, the commission developed two work groups focused on research and infrastructure and teaching and learning. The work groups analyzed various models by grade bands. It is important to note the different configurations or models for remote learning, some of which may be more appropriate for different learner groups based on needs, learning styles, interests, ages, and developmental levels. For example, K-2 students can benefit from online learning resources found on apps and websites for core subjects that: record student fluency and comprehension and allow for teacher monitoring; provide opportunities for virtual field trips to places they would not have access to otherwise; and allow students to connect and engage with other experts, people, and students around the world. Students of all ages can be engaged independently, in small group collaboration (with students from other classrooms in groups), as well as whole group and even whole school remote learning activities (e.g., an author visiting a class or school via Zoom to discuss a shared book reading).

To determine an appropriate design and associated costs, the Research and Infrastructure and Teaching and Learning work groups with the commission analyzed the following three different design models for remote learning:

1. Full-time — comprehensive (not recommended)
2. Part-time (option for partial day or limited period of time)
    a. Special courses (like virtual high school)
    b. Attending while at school supervised by teachers (K-5)
    c. Based on medical or mental health needs, travel, immigration-related considerations, or other individual needs
3. Purchased package by third party (full or part-time)

Discussion of the components of each model listed above highlighted common expectations and design for a successful remote learning environment. The lead components included:

- Highly aligned curriculum.
- Data-driven, evidence-based instruction aligned with the Common Core of Teaching.
- Evidence-based assessment practices.
- Positive climate and culture to support attendance, engagement, and social-emotional learning.
- Responsive accommodations and wrap-around student services.
- Administrative policy and procedures aligned with the Common Core of Leading.
- Embedded professional learning aligned to CSDE Professional Learning Standards.
- Intentional family/home school connections.
- System of monitoring progress and continuous improvement.
- Appropriate level of readiness by age or grade level.

Further analysis and discussion with state and national models highlighted the need for further research on what could be required of secondary components to ensure a successful remote learning environment:

- **Flexibility:** Opportunity for students and parent choice and flexibility in the types and modes of learning that work best for individual learners rather than a one-size-fits-all approach. Ability to provide for flexibility to meet the needs of the individual learners. Instruction provided outside traditional school hours may be required, increasing time and cost.
- **Learning Modalities:** Opportunity to align the remote learning school model with mastery-based learning to allow for asynchronous as well as real-time learning opportunities. The platform and program should allow for students to demonstrate mastery of subject knowledge at multiple points, allowing them to advance at their own pace of learning. Limited assurance of use of the established Connecticut Standards for Remote Learning, as well as knowledge on learning styles, developmentally appropriate technology, and the guidance for technology usage for different age groups. There is vast research on learning styles and instructional approaches, including information on how students learn from technology. When determining a program, data and research should serve as a basis of practice. We should also temper that knowledge with the limitations of any specific platform. For example, if we know that connection is essential for engagement and screenshare can only show a maximum of 12 students, class size might be limited to ensure that all students can be visible.
- **Technology Platform:** The State could leverage an existing, available learning-management system to support a remote learning school. Flagship, best-of-class systems exist that will allow Connecticut schools, educators, and students to leverage the most current features in remote learning environments.
- **Staffing:** Design considerations must account for teachers and administrators equipped with necessary skills to ensure successful outcomes for students. Such models may require that teachers specialize in remote instruction to provide efficiencies in instructional expertise. Costs need to assume alignment with current union requirements.

- **Setting:** A "remote school" connotes students learning at home, but engagement in such a learning experience could also take place within the four walls of a local school, with appropriate technical support and additional accommodations as needed.
- **Local Engagement:** Student success will demand strong connections with their home districts, whether they participate in a full- or part-time remote learning experience.
- **Equity:** Assurance of access to all supports and services.
- **Design:** One size may not fit all—what works in high school will not translate into elementary models. Commission research highlights the best practice of determining the age-appropriate nature of the experience. What is developmentally acceptable for a third-grade student versus a middle school student or high school student should be the basis for any offering.
- **High Needs of Learners:** The chosen model must meet the needs of exceptional learners, including students receiving special education services and English/multilingual learners and twice exceptional learners, i.e., intellectually gifted children who have one or more learning disabilities.
- **Class Size:** Commission research highlights a need to maintain a low-class size of no more than 18 to provide the instructional support for personalized learning.

The feasibility analysis to provide coursework and curricula that is of high quality and rigorous proved that a state-sponsored school that lives independent of any of the current school district structures in Connecticut seems like the least feasible option. It would, in essence, be creating an entirely new school district with budgetary implications we are not convinced would be wise for the state to take on at this point. Additionally, the assurance of access to coursework and a curriculum that is high quality, rigorous, and aligned to state standards cannot be guaranteed. The administration costs and the infrastructure needs would be significant.

Task 2: Adequate Support Services

The Remote Learning Commission developed a specific work group focused on teaching and learning to identify what adequate support services are required to ensure all learners have access to meet their need and strength. The work group presented key findings from the field and research, including the published CSDE Standards for Remote Learning to develop the following considerations. The communication of specific support services would require clear messaging of roles and responsibilities of the educators interacting with students and families, as well as the set expectations throughout the process of enrollment, learning, and transitions. Over the course of nine meetings from September 2021 to June 2022 the commission determined that if feasibility is determined, the following support services, including teaching and learning, should be considered:

1. Tech support services are provided depending on location (state, local, or both)
2. Low teacher-to-student ratio
3. Paraeducator support
4. Access to counseling/advising services for students and families
5. Multilingual learners support for students and families, including specialized courses such as native language instruction
6. Supervision of students when learning from home to support families
7. Designated contact or coordinator from the district or state to ensure students and families are connected to the remote learning school and local district
8. Mental and physical health services
9. Access to meals
10. Special education services
11. English learner services/multilingual services
12. Access to social and emotional supports
13. Tutoring and interventions support and services

Additional guidance comes from the CSDE Standards for Remote Learning listing the need for reliable access to:

- High-quality instruction aligned to rigorous grade-level standards daily.
- High-quality instruction with integrated technology daily.
- Differentiated/personalized supports based upon the student's individualized needs.
- Caring adults.
- Technology, including reliable internet.
- Healthy food and nutrition.
- Health and wellness resources (physical and mental).
- Transportation to access the school facilities, resources, and extracurriculars.

Findings

The commission has learned from the research conducted over nine meetings that it is of critical importance that a statewide remote learning school have an infrastructure to ensure the core components identified are practiced.

The commission has also determined that a state-controlled school that lives independent of the local education agency appears not to be feasible. Any recommended design would require the local enrolling school to retain autonomy to provide adequate support services and access to extracurricular activities, assessments, and other services.

With regard to teaching and learning, the commission determined the specific needs and supports by grade band and age that are necessary to ensure adequate support services for the students receiving or participating in a remote learning school. The list below is a summary of findings by grade band and age:

1. K-2 classes/programs must meet the needs and State Board of Education-approved standards for early childhood education. This should include a teacher as well as at least one paraprofessional for each group of children to help monitor and support their learning. A strong home-school connection with guidance and support for parents/families/guardians is necessary.
2. Teachers in remote settings must provide individual/personalized teaching and support as well as small and large group tasks and activities that promote the development of executive functioning skills, purposeful play, communication, and collaboration/social skills among students.
3. While preschool was not included in the designated scope of Section 387 of Public Act 21-2, JSS, careful consideration must be paid to how preschool might, or might not, be included as a part of any early elementary remote learning options. Considerations regarding developmentally appropriate practices, as well as alignment and transition across grades must be included as a part of any model for remote learning.
4. Provide opportunities for students to work online (remotely) as well as offline doing hands-on projects (e.g., collage, diorama, 3-D models) to demonstrate learning.
5. Ensure students who are in full-time and/or third-party programs have access to extracurricular activities (e.g., sports, clubs, drama, music programs, dances, school-based celebrations, fun nights) at their local schools so that they can still engage socially with peers their own age.
6. Administrators, faculty, and staff must have high-quality professional learning and training aligned with the CSDE adopted Professional Learning Standards and the Standards for Remote Learning to prepare each designated remote learning educator for integrating research and best practices when teaching remotely; best instructional practices for actively engaging students in learning; and helping them achieve academic, social, emotional, physical, and cognitive success.
7. This commission has learned of the need for adequate training in the use of technology for remote learning (for educators, students, and families who may be involved in supporting learning at home) as well as technical support and access to efficient connectivity and other necessary hardware and software technology tools.
8. Adequate time and funding to support the possible need for specialized curriculum development and implementation of subjects that are aligned with state and local curriculum standards for use in full-time and part-time remote learning courses/classes that are not being provided by an independent third party.
9. Provide access to professional learning communities (PLCs) and networks for the remote learning teachers to provide opportunities for teachers and administrators to collaborate and learn with and from each other (e.g., analyzing data, sharing best practices, book study, team-teaching, peer coaching).

Upon interviewing national remote/virtual learning school models, the commission determined that a third-party solution independent of the CSDE for remote learning has the potential to position the student away from the designated school point of contact and their neighborhood. As a result, the student may feel isolated and disconnected from same-age peers and caring adults who would otherwise be made available in an in-person, on-campus school.

Recommendation

The Remote Learning Commission recommends that a statewide remote learning school that services students in grades K-12, inclusive, does not have the ability to meet the expectations for teaching and learning, instruction, assessment, and accommodations with wrap-around supports to students and families.

Further, the commission recommends that a statewide remote learning school does not have the ability to provide options to ensure that students who are receiving or participating in remote learning have adequate parental or adult supervision, educational support, technical assistance, continuity of attendance, and engagement.

Fiscal Impact of Remote Learning

Section 387 of Public Act 21-2, JSS, calls for an analysis of the costs to the CSDE and the State of Connecticut associated with establishing one or more public statewide or regional remote learning schools, including an examination of how other states have utilized such statewide remote learning schools, including the fiscal impact that various remote learning models could have on local and regional school districts.

Process

To determine the fiscal impact of remote learning, the commission's Research and Infrastructure Work Group researched the Connecticut Adult Virtual High School model, which has offered remote learning across the state for over 15 years and serves 550 students for $300,000. National models provided additional research to determine what it would take to start a fully remote school. The assumptions presented in table 1 include providing a platform, Connecticut-certified instructors, administrators, course content, and training for instructors. Additional data were collected from school and district audited expenditure reports to determine the allocation of resources in percentages within a full academic school year.

This resulted in including an average statewide per-pupil expenditure of $15,584 to develop budget assumptions in table 1.

The commission has assessed high-level costs for a full-day remote learning school available to all students. The model assumes participation of 5% for grades K-6 and 10% of students participating in grades 7-12 statewide by grade bands, or 36,987 learners. Enrollments would vary by grade level (e.g., grades K-6 would have an estimated enrollment of two courses—core and special—per student). Each teacher is estimated to teach one section with a class size estimated at 18. In the middle and high school grades, each student is estimated to have seven enrollments (core and electives). Each teacher is estimated to teach 3.5 sections. Given this scenario, teachers may be full time if teaching a full load or a few specialized sections with a class size estimated at 18.

The K-6 design would require 1,400 teachers, and the 7-12 design would require 2,710 teachers. Combined, both models would require 137 administrators (one for every 30 teachers), 124 school counselors (one for every 300 students), 74 school psychologists (one for every 500 students), 165 instructional coaches (one for every 25 teachers), 116 administrative support staff (one for every 40 teachers, administrators, counselors, school psychologists, and coaches), 190 information/instructional technology support staff (4% of all staff including administrative support).

Technology cost (approximately $1,000 for every student and staff over three years; $333 shown for one year) is $41,903.

Findings

The commission's analysis of remote learning has concluded that the need has not yet been demonstrated or identified with clarity that this level of commitment would be warranted.

Questions that remain in determining the feasibility of a statewide remote learning school that serves students in grades kindergarten to 12, inclusive, are:

1. Is there an identified need that is so profound that it outweighs the costs?
2. Is there a demonstrated demand?

The assumptions listed in table 1 provide a detailed description of the estimated annualized number of participants and budget for a statewide remote learning school.

Table 1. K-12 Statewide Remote Learning School Budget Assumptions

Description	Estimated Number of Remote Students (5% for K-6 and 10% for 7-12)	# People	Annualized Salary + Benefits Per Staff	Annual Cost	Three-Year Total Cost
Teachers K-6 • 5% of 251,959 total students • Each student is estimated to have two enrollments (core + special) • Each teacher is estimated to teach one section • Class size estimated at 18 • Salary + benefits estimated at $90,000	12,598	1,400	$90,000	$125,980,000	$377,940,000
Teachers 9-12 • 10% of 243,890 total students • Each student is estimated to have seven enrollments (core + electives) • Each teacher is estimated to teach 3.5 sections because teachers may be full time if teaching a full load or just some specialized sections • Class size estimated at 18 • Salary + benefits estimated at $90,000	24,389	2,710	$90,000	$243,890,000	$731,670,000
Administrators (one administrator for every 30 teachers)		137	$150,000	$20,550,000	$61,650,000
Counselors (one counselor for every 300 students)		124	$90,000	$11,160,000	$33,480,000
School Psychologists (one school psychologist for every 500 students)		74	$90,000	$6,660,000	$19,980,000
Instructional Coaches (one coach for every 25 teachers)		165	$90,000	$14,850,000	$44,550,000
Admin Support Staff (one for every 40 teachers, administrators, counselors, school psychologists, and coaches)		116	$60,000	$6,960,000	$20,880,000
IT Support Staff (4% of all staff including admin support)		190	$90,000	$17,100,000	$51,300,000
Technology cost (approximately $1,000 for every student and staff over three years; $333 shown for one year)		41,903	$333	$13,967,416	$41,902,248
Special education (estimated at 20% of the total budget)				$115,279,354	$345,838,062
Total	**36,987**			**$576,396,770**	**$1,729,190,310**
Per Pupil cost				**$15,584**	**$15,584**

Recommendation

The Remote Learning Commission recommends not to embark on the process of establishing a full-time comprehensive, statewide remote learning school that services students in grades kindergarten to 12, inclusive, at this time due to the projected annual cost of $576,396,770.

Recommendations

The Remote Learning Commission recommends not to provide a full-time comprehensive, statewide remote learning school to students enrolled in grades kindergarten to 12, inclusive, that is maintained by and under control of the Connecticut State Board of Education due to (1) a statewide remote learning school does not have the ability to meet the expectations for teaching and learning, instruction, assessment, and accommodations with wrap-around supports to students and families; (2) a remote learning school does not have the ability to provide options to ensure that students who are receiving or participating in remote learning have adequate parental or adult supervision, educational support, technical assistance, continuity of attendance, and engagement; and (3) a statewide remote learning school has a projected annual cost of $576,396,770.

Given the findings and recommendations presented in this report, the following next steps are presented. The Remote Learning Commission will work to:

1. determine the scope of work as outlined in Section 388 of Public Act 21-2, JSS, to develop a plan for a statewide Remote Learning School for school year 2024-25; and
2. determine demonstrated need.

As the CSDE and the Connecticut Remote Learning Commission transition to the next phase of analysis and development as outlined in Section 388 of Public Act 21-2, JSS, the commission recommends the following next steps for consideration.

Survey and focus group questions should be designed to query several domains, including:

- Ascertain interest in participating in a remote learning school.
- Identify opportunities and concerns of meeting student needs in a remote setting.
- Identify supports needed in home and community settings to support student participation and learning in a remote setting.
- Identify barriers to participation.
- Explore ways to create a school community in a remote setting.
- Explore ways to create connections with sending school community.
- Identify supports needed by families to support remote learners.
- Identify home-school resources that may need to be available/accessible to remote learners.
- Engage LEAs that have implemented remote learning programs for grades 9-12 to study and learn from each model.
- Further study SEA remote learning models that require the local enrolling school to retain autonomy to provide adequate support services and access to extracurricular activities, assessments, and other services.

Effective community engagement is seen as a necessary component for designing the remote learning school and as such must be resourced appropriately. At least 20 different focus group audiences have been identified for survey and focus group participation. Support will be needed for scheduling, conducting adequate outreach, survey design and implementation, focus group design and implementation, data collection, analysis and interpretation, and report writing. Given existing staffing constraints at the CSDE, it is recommended that funding be allocated to obtain consultant services through partner agencies such as the State Education Resource Center (SERC), regional educational service centers (RESCs), or other entities to conduct this aspect of the exploration and planning.

Designing surveys that can be conducted via multiple means such as online, via texting, or over the phone that are available in multiple languages and for the visually impaired will ensure the broadest reach. Using district contacts across the state and the identified focus group partners will allow for broad dissemination of the survey. Focus groups should be designed to meet the work schedules of various constituencies (daytime and evening, weekdays, and weekends), in various locations across the state and with language translation easily accessible. Focus groups should be led by skilled facilitators identified by the consultant in partnership with CSDE team members.

It is recommended that the dedicated CSDE website for the Remote Learning Commission be expanded to house information about the remote learning school feasibility and implementation planning process. This interactive

webpage can display the survey, provide an overview of concepts, announce opportunities to volunteer for focus groups, and provide a repository for summary information on responses received. Opportunities to comment on and provide additional feedback can be managed through this online platform.

Recommended Timeline

- November-December 2022: Onboard consultant
- November-December 2022: Survey and focus group development
- December 2022-March 2023: Conduct focus groups
- April 2023: Analyze results and draft recommendations

Glossary of Essential Terms

assessment. The process of assessing student learning includes multiple means for demonstrating learning that results in an evaluation or inference. Demonstrations of learning are aligned to the benchmarks and standards that allow students to show what they know through products, performance, and evidence of learning, skill development, and content understanding.

asynchronous learning. Students complete their work assigned on their own time. Students are given a timeframe—usually a one-week window—during which they need to connect to their class daily or as determined by the teacher. When asynchronous, students can access assignments and content at any time of the day (or night). Before remote and distance learning, students engaged in asynchronous learning when completing projects assigned to complete at home over an extended period of time.

curriculum. Curriculum is different from state and national academic standards in that standards define what students are expected to learn by subject and grade. The curriculum combines how teachers will teach to develop skills, content knowledge, and assess students' ability to transfer learning. Curriculum is the central roadmap for communicating essential learning outcomes for mastery by the end of a grade or grade band. The structure and organization of curriculum is guided by a curriculum framework that must include standards-aligned concepts, skills, high-impact instructional methods, high-quality materials, and multiple means of assessment aligned to standards.

differentiated learning (DL). The process of modifying or delineating some aspect of instruction: the content, process, product, and/or learning environment to address the needs of the learners by the teacher. DL differs from personalized learning as it is a facilitated process that moves the learner to the center of the planning.

educational standards. The learning goals for what students should know and be able to do at each grade level. Educational standards are not a curriculum. Educational standards are adopted by the Connecticut State Board of Education to guide the development of high-quality curriculum and high-impact instruction. Local communities and educators customize and personalize the development of curriculum aligned to the approved educational standards, district needs, and portrait of the learner.

formative assessment practices. Not a single test but a series of effective teaching practices—inseparable from instruction. Practices include clarifying the purpose of the learning, providing exemplars so students know what good work looks like, using activities that engage students, eliciting evidence of their learning, providing feedback that helps learners to know what they need to do to continue learning, using students as learning resources for one another, and increasing student ownership of their learning.

mastery-based learning. Systems of instruction, assessment grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education. In public schools, mastery-based systems use state learning standards to determine academic expectations and define "mastery" in a given course, subject area, or grade level.

personalized learning. The term personalized learning, or personalization, refers to a diverse variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students.

professional learning. High-quality professional learning is a process that ensures all educators have equitable access throughout their career continuum to relevant, individual, and collaborative opportunities to enhance their practice so that all students advance toward positive academic and non-academic outcomes.

remote learning. Public Act 21-2, JSS, defines remote learning as instruction by means of one or more internet-based software platforms as part of a remote learning model. Students and educators are not physically present in a traditional classroom environment. Instruction is relayed through technology, such as a learning management system with embedded tools like discussion boards, video conferencing, online assessments, and teacher/administrator dashboards to monitor progress from remote locations.

synchronous learning. Face-to-face teaching (on site/on campus). Classes and learning occur on set schedules and timeframes. Students and teachers are online at the same time in synchronous classes. When blended or remote, all students must be online at that exact time to participate in the class.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